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RICHARD COCKBURN MACLAURIN

1870—1920

Cæsar Augustus found Rome brick and left it marble.

Richard Cockburn Maclaurin, ten years ago, found a great institution barred from potential supremacy in its field by poverty. Trained as scholar and investigator rather than administrator, he addressed himself to the problem of administration and of endowment under heart-breaking difficulties.

In ten years he moved the Institute to Cambridge, found the land and the money to buy the land, found a munificent donor, found subsidy from the State, made a statesmanlike arrangement with Harvard University, put the Institute at the service of the government in time of war and administered that service notably, then labored for a permanent endowment which should leave him free to carry out his long-cherished plans for more perfect organization for usefulness.

Worn out with that struggle for money he died, as died Rogers and Walker before him, sacrifices. He saw his great endowment secure, his student body doubled, his faculty growing, and the inception of a plan which should give the school permanent and increasing funds and unexampled opportunities for usefulness.

At the moment of that triumph, on the threshold of that greater constructive service to which he had looked forward so eagerly for ten years, he died. His death was tragic, but in proportion as it was tragic, noble. To him, more than to any other single man, the world owes the new Institute which is the old Institute for the first time capable of its opportunities. The foundation stones of this new school are cemented with his life-blood. That fact, according to ancient tradition, should make its walls eternal. Let it be so!

Dulce et decorum est it is sweet and noble that a man should die for his work.

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RICHARD COCKBURN MACLAURIN

SUNDAY, JANUARY 18, 1920

Like a strong workman who labored in the heat of the day and had no part
in the fruits of his labor. . . .

Like a strong runner who came crying Victory! and laid hand on the goal
and his strong heart broke. . . .

Like a great captain who drave back the foeman and saw his land secure
forever and Death touched him. . . .

Like a cunning builder who raised the high walls against the winds and
might not see the spire of his dreams. . . .

Even so our Captain.

Under the roof of his building
In the wide clean spaces
He lies throned and at rest,
Robed in a violet pall and the sunlight on his face,
Round him and above him the quiet murmur of voices,
The sorrowful voices of his young men
Who come slowly and on still feet to behold his face. . . .
Guarded now and secure.

Bear him forth!
Lift up your heads, O great doors, and swing wide.
Bear him forth!
High on his young men's shoulders,
High between the long steady lines of his young men,
Slowly, steadily,
Out from the doors of the building he raised for us,
Into the blue and gold of the winter air,
Into the great wind sweeping the snow,
The long windows of his school behold him
And his great court
The cold still river, the serried roofs of the city,
And these, his young soldiers who stand with bare bowed heads
In the flying snow,
Bear him forth!
As the great wind sweeps his spirit forth and aloft
Out of this dwelling he built
Into the wider dwelling of his soul.

Greater love hath no man than this
That a man shall lay down his life for his friends.
Greater love hath no man than this
That a man shall lay down his life for his work.
This place is builded with his life,
Its years to come are quickened with his breath,
It is bought with a price.

The Grail he bore falls not,
Other hands lift it,
Hands zealous and reverent,
Other hands bear it strongly forward
In new times upon a new path.
And in the cup of the Grail shall shine forever a new light,
The white glow of his courage and his strength,
The light he kindled, unquenchable,
Pointing the way !

Tomorrow morning
The young men will go busily across the place where he lay shrouded in
violet
Young men with eager voices upon their business.
But there will be a great sunshine on the snow,
A great sunshine through the long windows,
And on the pavement a few sprays of bloom,
Dropped and scattered violets,
And in the high places . . . a spirit. . .
That will not die.

For lo, the winter is past
And the day-spring cometh!

— ROBERT E. ROGERS

THE DEATH OF PRESIDENT MACLAURIN

ON Thursday afternoon, January 15, Dr. Maclaurin, after an illness of less than a week, died of pneumonia. On a trip to New York the week before, in the final days of the endowment fund campaign, he caught a severe cold. On Friday, January 9, at his home in Cambridge he developed symptoms of what were thought to be grippe and was ordered to bed, in the hope that he might be able to attend the Alumni Jubilee dinner the following evening. On Saturday, however, he was worse and it was evident that he had pneumonia, but there was no thought of danger. In the early days of the following week, however, it was seen that he was critically ill and that the danger lay in the extreme weakness of his constitution, due to long and unremitting labor, without any vacation for over two years, and particularly to the exhausting bodily and nervous strain he had been under during the last few months in directing the endowment fund campaign. His reserve strength was almost totally used up and he had not the power to fight off the disease. On Wednesday his physicians gave out a very hopeful bulletin, so that his death, occurring late on Thursday, was unexpected and a proportionally great shock to every one.

Those of the students and faculty who had not seen the morning papers were dismayed to find every shade drawn in the long lines of windows and the flags at half mast. Exercises were announced suspended until Monday. At eleven the faculty met briefly to appoint necessary committees for funeral arrangements and at noon the student body for the same purpose. The funeral was set for Sunday afternoon.

On Sunday morning at 11.30 the casket was borne from the President's house beyond the Walker Memorial to the great lobby of the Institute in the center of the buildings, overlooking the court. The bearers were the oldest employees of the Institute: F. G. Hartwell, J. H. Macdonald, William Wilton, Charles Lang, Edward Pung, Boyd Goodwin, Jeremiah Halloran, and John E. Handy. They were escorted by a large group of the school's employees.

From 11.30 to 1.30 the body of Dr. Maclaurin lay in state in the center of the sunlit lobby, clad in his doctor's gown and hood, for all who wished to view it for the last time. The casket was covered with a heavy pall of smilax and violets, and above hung a single great wreath. There was no other sign of mourning.

For two hours that Sunday noon the students and alumni in great numbers passed through the lobby and before the casket which was guarded by four alumni in uniform, all officers and overseas men; Arthur Pennell Brooks, John M. De Bell, Donald Warner and J. Sidney Marine.

At half past one the students and alumni formed in a wide double line reaching from the Colonnade to Charles River Road and stood bareheaded in the cold sunshine, a keen wind swirling the snow over

them, while the casket, borne on the shoulders of eight prominent seniors, was borne to the waiting hearse. The bearers were Norman G. Abbott, president of the senior class; Warren L. Cofren, treasurer of the Institute committee; John C. Nash, president of the inter-fraternity conference; Edward D. Ryer of the Institute committee; Percy Bugbee, general manager of the Tech Show; Count Capps, general manager of THE TECH; Scott H. Wells, president of the Technology Christian Association, and Kenneth F. Akers, vice-president of the senior class.

At the special request of Mrs. Maclaurin, the services at the Old South Church, Boston, were of the simplest character, there being no eulogy and only organ music. The Rev. Dr. George A. Gordon, pastor of the church, at the close of the regular morning service, however, paid the following tribute:

"During the past week this church has lost by death one of its most influential members. We forget for the moment the man, remarkable for his attainments in exact science, and eminent for his skill as chief administrator of the interests of the most famous school of applied science in the English-speaking world. We think now of his bereaved family, the husband and father taken from that household of love and hope; we think of the human being whose influence over young men of intellect was so wise and commanding; we grieve that we shall see no more here the modest and magnanimous thinker, the noble and gentle character, the unostentatious but impressive exemplar of the sympathy of science and Christian faith. His address at our great anniversary, last May, was and will remain one of our precious documents; it was his confession of faith to his fellow-members here; it was a great word to us all upon the Lord God of our fathers, and the God and Father of our Master."

All races, the African, the Malay, represented by the Filipino students, and the Mongolian by the Japanese and Chinese, as well as the Caucasian, and some of Indian blood, and all ranks of life, from Governor Coolidge and President Lowell of Harvard, and Chief Justice Arthur P. Rugg of the supreme court to some of the humblest employees of the Institute, were represented among the throng that filled the Old South Church long before the hour of 3 o'clock. The floor of the auditorium was reserved until 2.50 for the student body, faculty and instructing staff, alumni members of the corporation and representatives from other institutions and societies. The balconies were opened to the public after some of the alumni had been seated there.

The honorary pall-bearers were:

Governor Coolidge; Wells Bosworth, architect of the Technology buildings; Dean Alfred E. Burton; Prof. Davis R. Dewey of the department of economics; Coleman du Pont of the corporation and treasurer of the Alumni Association; George Eastman, also of the corporation, and long the famous "Mr. Smith," Tech's generous benefactor; Merton L. Emerson; William Endicott and Frederick P. Fish of the corporation; Judge Robert Grant, a close personal friend of Dr. Maclaurin; Francis R. Hart, treasurer of the corporation; Charles Hayden and Gen. Edward Hayes of the corporation; Walter Humphreys, registrar of Technology; Dr. Malcolm Kinsella of Toronto, brother-in-law of Dr. Maclaurin;

President A. Lawrence Lowell of Harvard University; Charles T. Main and Everett Morss of the Tech corporation; James T. Munroe, secretary to the corporation; Henry S. Pritchett, former president of Technology and now of the Carnegie Foundation; James Ford Rhodes, the historian; Emeritus Prof. Robert H. Richards of the department of mines; Chief Justice Arthur P. Rugg of the supreme court; Senior Prof. William T. Sedgewick, head of the department of biology and public health; Dr. Payson Smith, State commissioner of education; Prof. Charles M. Spofford, head of the department of civil engineering; Charles A. Stone of the corporation; Moorfield Story, Prof. Henry P. Talbot, chairman of the Technology faculty; Elihu Thomson of the corporation; Ambrose Walker, son of General Walker, former president of the Institute; Edwin S. Webster and George Wigglesworth of the corporation.

The ushers, all heads of departments, were: Prof. D. C. Jackson, E. F. Miller, W. H. Walker, E. B. Wilson, W. H. Lawrence, A. L. Morrill, H. G. Pearson, H. W. Tyler, H. M. Goodwin, Henry Fay and R. S. Williams; also the following alumni: H. S. Ford, bursar of the Institute; Henry Morss, A. F. Bemis, F. H. Fay, I. W. Litchfield, Jasper Whiting and George L. Gilmore.

Mrs. Maclaurin, on account of the state of her health, was not able to be present. Besides Rupert Maclaurin, the elder of the two sons, aged 12, the only immediate relatives present were Dr. and Mrs. Malcolm Kinsella of Toronto, Can., the latter being the sister of Mrs. Maclaurin.

Others who went with the cortege to Mt. Auburn were Mrs. Hunsiker of Washington, whose husband is a naval officer, intimate friends of the Maclaurin family; Mrs. Edward Cunningham of Boston, Mrs. Morgan of New York and Mrs. Everett Morss. Dr. and Mrs. Nichols of Dartmouth College and Mrs. D. P. Rhodes sat in the family pew. Mayor Edward W. Quinn of Cambridge was in the assembly.

Despite the published request that no flowers be sent, the chancel was filled. On the reading desk was a beautiful spray of orchids and just below was a large wreath of Scotch heather, sent by the Women's Association of the alumni. Among the tributes sent by organizations were the following: Tech Club of Hartford, wreath of orchids and euphorbia; Buffalo Tech Club, wreath of Scotch heather; freshman class, wreath of pink roses; the dormitories, wreath of sweet peas; Chi Phi, wreath of orchids; Indiana Association, spray of sweet peas; Theta Deuteron, Charge of Theta Delta Chi, wreath of violets; senior class, wreath of orchids; class of 1914, spray of pinks; Alpha Chi Sigma, spray of white roses and violets; Tech Club of Springfield, wreath of violets and sweet peas; naval construction students, spray of roses and violets; Masonic Club, broken column; Lambda Phi Club, spray of orchids and pink roses; Sigma Tau of Delta Kappa Epsilon, spray of calla lilies; the faculty, a large wreath of laurel; Beta Chapter of Theta Chi, spray of callas and violets; class of 1917, wreath of orchids; Tech Show, spray of red roses; Osiris, spray of pinks; Tech Club of New York, large wreath of laurel; Tech men of Eastern Manufacturing Company, spray of roses and sweet peas; Lambda Chi Alpha, spray of pink roses; Tech Club of eastern New York, wreath of sweet peas and callas; Chinese students,

wreath of roses and sweet peas; Alumni Association, wreath of laurel; class of 1922, wreath of orchids; Kappa Sigma, spray of pink roses; Alpha Tau Omega, spray of roses; class of 1921, spray of white roses; Tech Club of Philadelphia, spray of white roses; Architectural Society, spray of callas; Mrs. J. L. Gardner, spray of pinks and sweet peas; C. A. Stone, large spray of roses and orchids; T. N. Vail, wreath of violets and sweet peas; Charles Hayden, spray of roses; George Eastman, spray of white roses; Mr. and Mrs. A. L. Thorndike, spray of violets; Norwegian students, wreath of orchids.

Organist Henry E. Wry played Mendelssohn's Funeral March, the slow movement from Beethoven's sonata, op. 2, Handel's Largo and as a recessional, Guilmant's Funeral March.

After prayer by the assistant minister, the Rev. Archibald Black, the congregation sang the hymn, "O, God, Our Help in Ages Past," and the Rev. Dr. George A. Gordon read the scripture selections in the burial service of the church. The congregation sang: "For All Thy Saints, Who from Their Labors Rest."

The Rev. Dr. Gordon offered an eloquent and impressive prayer, beginning: "Infinite Father, Soul of the Universe, Absolute Spirit, Living God, Lord of Light, we thank thee that we live and move and have our being in thee, and that those who leave this world of mystery still live in thee. Source of our energy, we rest our humanity upon the created good and upon the will of the Eternal Father. We mourn today, with profound grief, over our irreparable loss. We mourn in grief, still in hope, for his mercy endureth forever. We thank thee for this leader and commander of youth, his rare gifts, his gentle, strong, lovable nature; his high spirit, his rich and tender humanity and his wide, prevailing power of life. We thank thee for the honor of his friendship. We bless thee for the intelligence that will not pass away. Tenderly and reverently do we commend thy servant to thy care, confident that we shall meet him again, in the light of eternal day." In conclusion, he prayed for especial blessing upon the widow, and fatherless sons; for the great institution, that friends may rally about it with ever greater zeal; for the students who have lost so great a friend, so revered and loved, that they may look to the sources of his power; and finally, for the city and the nation of which the departed was so loyal a citizen.

When the casket was borne out to its last resting place, there rested upon it only the wreaths of laurel sent by the faculty and the alumni.

HIS LIFE AND WORKS

RICHARD COCKBURN MACLAURIN, B.A., LL.M., M.A., Sc.D., LL.D., B.A., Cambridge, 1895; LL.M., Cambridge, 1898; M.A., New Zealand, 1899; LL.D., Cambridge, 1904; Sc.D., Cambridge, 1908; D. Sc., Dartmouth, 1909; LL.D., Wesleyan, 1909, and Harvard, 1910. Since 1909 President of The Massachusetts Institute of Technology.

Already notable in three branches of learning, as student and professor in law, in mathematics and in physics, it might have seemed that Dr. Maclaurin was foregoing the very real possibilities of scientific eminence when he resigned as head of the department of physics of Columbia University to take the presidency of the small, however well known, and certainly poor and struggling Massachusetts Institute of Technology. He did it with diffidence, with the proviso, we are told, that he shouldn't "have to raise money." He laid by his scientific aspirations and devoted himself to the unending and arduous task of administration. In that he found, if not his chosen work, at least the work obviously chosen for him. He became through his creation of the new Technology a figure of international importance in the scientific and industrial world. He became one of the University builders, to take his place with Eliot, Hadley, Angell and Butler. During the war he became a person whose opinion was valued in Washington and whose services were required. He secured great gifts and great givers and he was "all set" for greater things under the most favorable conditions, when death took him. He will be remembered, not as a man who made himself master of three difficult branches of knowledge, but as builder and administrator.

Richard Cockburn Maclaurin was born at Lindean, Scotland, on June 5, 1870, the son of Robert Campbell Maclaurin and Martha Joan Spence Maclaurin. He spent his boyhood in New Zealand, where he received his preparatory education in the Auckland Grammar School. He returned to Scotland to complete his education in the preliminary English schools, where he took the lead in scholarship.

In 1892, when he was 23 years of age, he entered the University of Cambridge, England, where he held a foundation scholarship in St. John's College, a great distinction for a young student. He took two degrees while at Cambridge, that of bachelor of arts in 1895, and master of arts in 1896. In his work for the latter degree, Mr. Maclaurin took the highest rank in the most advanced mathematical examination, being bracketed with the senior wrangler in the first division of the first class in part two of the mathematical tripos.

He received also the "Smith Prize" at Cambridge for the excellence of his thesis in mathematics, his thesis being preferred to that of the senior wrangler, an exceptional and almost unprecedented honor. Upon his being graduated he was elected a Fellow of St. John's College,

Cambridge, over several hundred competitors. He spent much time at McGill, Toronto and Leland Stanford universities.

In 1897 he returned to England and re-entered Cambridge University. This time he took up the study of law and was awarded the McMahon law studentship, the most highly valued of its kind in the university. At this time, he became a member of the Honorable Society of Lincoln's Inn, London. During this period he spent six months on a leave of absence in studying in Germany.

In 1898, he was awarded the Yorke prize by the University of Cambridge, for his thesis on "The Title of Realty," a difficult and important topic in British law, whose proper presentation had baffled many more experienced scholars. The thesis was published in English and French. Professor Maclaurin thus gained the two most coveted prizes of Cambridge University in two absolute and distinct branches of learning—mathematics and law.

In the fall of this year, when he was but 28 years of age, he was appointed professor of mathematics in the University of New Zealand and soon after became a trustee of the university. In 1903, he was made dean of the faculty of law in the University of New Zealand, which office he filled for the succeeding four years.

In the fall of 1907 he accepted the chair of mathematics and physics in Columbia University, New York City, which had been previously held by the learned Dr. Robert S. Woodward, who resigned the office to become president of the Carnegie Institution at Washington, D. C. In the following year he was appointed head of the department of physics of Columbia University.

In the early fall of 1908 Professor Maclaurin was elected by the corporation of Technology to be president of the Institute. For more than three years Technology had sought a man to take the place of President Pritchett. When Columbia University secured a successor for his position as head of the department of physics, Professor Maclaurin resigned and prepared to assume the duties as president of Technology.

Before a gathering of distinguished educators, members of the alumni and undergraduates, Professor Maclaurin on June 7, 1909, was inaugurated president of the Massachusetts Institute of Technology. The exercises consisted of a welcome by the church, the Commonwealth of Massachusetts, Harvard University, the Technology corporation and the alumni. All paid tribute to the new administrative head of the Institute.

By two days President Maclaurin had passed his 39th birthday anniversary when he assumed the office of head of Tech. In his inaugural address he said that the end of education is to fit men to deal with the affairs of life, honestly, intelligently and efficiently, and that science and culture should go hand in hand, and that the school should preserve in the students the freshness and vigor of youth, and see to it that the natural powers of initiative are improved and not checked by the school.

In the early days of his administration he saw that the great need

of Technology was money. He voiced the hope of a splendid future for the institution; and said constantly that the school needed increased equipment of buildings and appliances.

The story of his accomplishment as president is familiar to every Technology man. What is not known so well, perhaps, is that Dr. Maclaurin died with his mind full of ideas as to the opportunities now for the first time open to Technology. He gave his ten years of service as president almost exclusively to the task of raising money. The problem was never out of his mind. He knew that he could do nothing constructive in technical education until Technology was freed from the constant worry and the constant necessity for more money to "tide her over another bad year." And he rightly considered most of his work as preparation only, as laying in the necessary supplies.

To sum it up briefly: He got \$100,000 a year for ten years from the State of Massachusetts; he got the money for the new site and then the money for the buildings on it; he discovered Mr. Eastman; he hoped and worked to the end that the Institute might share in the money and the opportunities provided by the McKay bequest. For a year he tasted success in that. Then disappointments came thick and fast. The war put the Institute in financial straits; its expenses became more than ever onerous; the State of Massachusetts revoked its annual grant; and finally the courts decided the working agreement between Technology and Harvard contrary to the intention of Mr. McKay's will. It became absolutely necessary that something permanent be secured, a permanent endowment large enough to leave Technology free to do its work. So, after a year of war work without vacation, Dr. Maclaurin put in another summer and autumn and winter without rest and helped make a certainty the endowment fund of eight millions the possibility of which he alone had provided for through Mr. Eastman. And on the morrow of success he died, his preliminary work alone done, his foundations laid, his structures to be built by other men.

He leaves, besides his associates and co-workers, his faculty, his students, and his personal friends, three to whom all hearts go out in their deep personal bereavement, his widow, Margaret Alice Maclaurin, the most dearly beloved and most gracious lady, who for ten years has been her husband's staunch co-worker and the friend of all who bore the Institute's name, his young son Rupert and his little boy Colin.

Dr. Gordon of the Old South Church bears eloquent testimony to Dr. Maclaurin's character as a deep and earnest practical Christian. His unceasing labor and devotion during the years of the war, even if we did not know that in 1915 he formally became an American citizen, gave proof of the kind of American he was.

R. E. R.

RESOLUTIONS BY THE CORPORATION

RESOLVED that the following be spread upon the records of the Corporation as an expression of the profound sorrow and sense of loss caused by the death of our beloved president, Richard Cockburn Maclaurin, and a tribute to his memory, and that a copy of the same be sent to his family:

Richard Cockburn Maclaurin, since 1909 President of the Massachusetts Institute of Technology, died after a brief illness, on the fifteenth day of January 1920. By his death not only does the Institute lose a leader of the highest quality whose achievements in the past only foreshadowed those that were to come, had his life been spared, but our country and the world is deprived of a great citizen whose loss is deeply to be deplored. Moreover, all those with whom he had come in contact whether in social relations, as an educator and administrator, as a public servant or as the head of a great institution of learning about whom centered the loyal devotion of a host of graduates, students and fellow workers, had for him not only respect and admiration but warm feelings of regard and affection such as few men have the quality to excite. To his friends and to those who knew him, his death is a personal distress and his loss one for which there is no compensation.

He was born in Scotland in 1870 of a family of refinement, many members of which had been distinguished in scholarship and science. He was fortunate in that he grew up in New Zealand, where he had the benefit of an environment entirely different from that of our older civilization. This resulted in a broadening of his views and an enlargement of his ideas, which were distinctly helpful to him in his later work.

Entering the University of Cambridge, England, he there received the Degree of Master of Arts in 1897, with marked distinction in mathematics. He then turned his attention to the study of law and, in 1898, was Yorke prize man in law at that University.

Returning to New Zealand with this unusual and admirable equipment as a scholar, especially in mathematics, physics and law, he remained in that colony until 1905, serving for seven years as Professor of Mathematics in the University of New Zealand and for two years as Dean of the Faculty of Law in that University.

In 1907 he became Professor of Mathematics and Physics in Columbia University, New York, and in 1909 was elected President of the Massachusetts Institute of Technology.

Meantime, he had written and published books and articles of a high order of merit on both scientific and legal subjects. His elaborate works on the theory of light placed him in the front rank of physicists.

He had travelled much and had been in particular a student of education and educational methods in different parts of the world.

When therefore he became President of the Massachusetts Institute of Technology, he had acquired from study and personal contact unusual knowledge of many different phases of our civilization and

particularly of educational systems and had a broad foundation of scholarship, comprehensive in the important fields of law and physics and extensive in all branches of human effort.

He became President of the Massachusetts Institute of Technology at a critical time in its history. While the Institute had rendered great and constantly increasing service to education and to scientific development and the application of science to the arts, the time had come when it had largely outgrown its facilities and required re-establishment on a new basis. Not only was the material problem of a new and enlarged plant in a new location of vital importance, but the necessity that the standards of the Institute should be maintained in harmony with the demands of constantly changing and expanding industrial conditions, with which the Institute must surely keep pace, required renewed study and analysis of educational methods and conditions. Thorough consideration of the entire educational program, not limited to the apparent exigencies of the moment but involving a sound forecast of the necessities of future development, was essential if the ideals of the Institute were to be realized.

An incidental question of great importance which had to be faced and settled was that of the relations with Harvard University which had been a subject of consideration for many years.

To these problems and to many others of a more detailed character which were involved in the general consideration of the future of the Institute, the new President devoted his thought and energy from the very beginning and without cessation until the end of his life. The magnitude as well as the difficulty of these problems appear more clearly, now that we look back upon them, than they did in 1909. They were not only physical, financial, educational and administrative but distinctly social, in that the new conditions that were to be brought about must surely be such as to harmonize with the demands of society and the need of the times. The different phases could not be dealt with separately but every effort and every achievement in one direction required corresponding effort and achievement in others, that the harmony and unity of the organization as a whole might be maintained.

The large success of the Institute in developing from its condition in 1909 to that of the present day is generally recognized. There can be no question that the credit for this success is due to a marked degree to President Maclaurin, his character, capacity and personality. While he has had the loyal support of those associated with him in the management of the Institute and of its alumni, that support would never have been consolidated for effective and enthusiastic effort if it had not been organized and directed by him and if he had not had the rare qualities required to stimulate enthusiasm and to concentrate in persistent, harmonious work the efforts of all those who were called upon to cooperate with him. Back of all was the necessary element of far-sighted leadership which should plan and develop in general and in detail and determine the direction in which work should be done. Such leadership required for success a capacity and quality seldom found. It was because the leadership was equal to the emergency, and the plans adequate, that the friends of the Institute became inspired with that zeal and confidence which placed them solidly behind the work.

Those who have been in a position to follow the development of the Institute since 1909, and all others who will take the trouble to study the subject as a matter of history, will agree that for the purposes of this great undertaking no one could have exhibited greater qualities of power and leadership than President Maclaurin. With clear intelligence he analyzed all phases of the problem. His energy and capacity in dealing with the complications of the situation were without limit. He faced the financial difficulties with the utmost courage and confidence, but never permitted them to divert his attention from the educational and administrative work so as to allow the latter to deteriorate. When the new plant was assured, he gave wise and adequate attention to the very difficult problem of transferring the work to the new quarters without impairing its quality. As a great leader he was behind all the details of the organization involved in establishing the Institute in its new environment, utilizing to the utmost the help and co-operation that was so freely and loyally at his disposal, giving full credit to every one, but himself contributing the vital and essential elements of direction, coherence and stability.

Outside the great achievement of financing and establishing the new plant without even temporary disintegration of the quality of work of the Institute, certain special difficulties came into the situation which were calculated to try the soul of a leader. The first was the Great War, which, if the affairs of the Institute had not been handled by a master mind, might have led to a most serious impairment of its efficiency. Here President Maclaurin showed to a marked degree his extraordinary intelligence and power to keep in order a situation that tended toward chaos. He carried the Institute through the war period with its efficiency unimpaired and with even an increase in its capacity for service. Nor should it be forgotten that during the war, he added to the burdens of his work admirable and effective service for the Government in fields outside the affairs of the Institute. As Director of College Training for the War Department, he played a conspicuous part in organizing the colleges of the land so that in the face of most trying conditions, their work was practically uninterrupted, while at the same time they performed valuable service in training their students for the exigencies of the war period.

A second episode, that was to him most disheartening and which only his rare qualities of mind and character enabled him to meet without finching, was the ultimate failure of the effort to establish sound educational relations with Harvard University. Firmly convinced that the interests of the Institute and of education generally required that there should be close co-operation with Harvard University in the teaching of applied science President Maclaurin worked zealously to that end for years, again showing throughout the negotiations, which were conducted in the most admirable spirit on both sides, his power of dealing with great questions and his capacity as a leader in thought and action. When the relations between the two institutions were established on what seemed to be a sound and permanent basis, he felt that an important part of his work had been accomplished. He believed that the joint effort of Harvard and the Institute would surely result in the greatest engineering school in the world and in a gain to education and to the

prosperity of our country which could not be measured. Because of the views of the Court as to the true construction of Gordon McKay's will, all this work and effort failed, necessitating an entire readjustment of the program for the development of the Institute. It is largely to the credit of President Maclaurin that this reversal of its policy, forced upon it by conditions which it could not control, did not involve even temporary embarrassment of a serious character to the Institute.

Although bitterly disappointed and forced to approach the general problem of the development of the Institute from an entirely different point of view, President Maclaurin did not for one moment lose his confidence or his courage. The seriousness of the situation, of which he was fully conscious, particularly when the strain upon the resources of the Institute arising from the conditions excited by the war and the fact that payments from the State would soon cease were taken into account, only served to inspire him to further strenuous effort.

With the most indefatigable energy, he assumed the leadership of a new campaign to establish the Institute's finances upon a firm footing, again showing, to a superlative degree, all his qualities as a great leader, — sagacity, power of conception and of administration, energy and a capacity for inspiring others. Again his work was crowned with success and on the very day on which he was stricken down by the illness which proved fatal, there was held the meeting of the alumni which was to note this new triumph of the Institute and of its President.

All through the record stand out conspicuously the great qualities of the man which have resulted in such great achievement. The obligations of the Institute to its many friends and in particular to the giver so long unknown, who has made such worthy use of the reward that came to him for his foresight and ability in giving to the world a great industry which operates only to the advantage of men, can never be expressed in words. They can only be felt. But this giver and the others who have co-operated with him, will be the first to recognize that, except for the personality of the President of the Institute and their confidence that under his guidance its future as a great power for good in this country and in the world would be assured, they would not have felt so strongly that it was the Massachusetts Institute of Technology which should have the immediate advantage of their liberality and good intent.

In no department of his work for the Institute has President Maclaurin failed to show the same high qualities of power and leadership. He deserved and retained the confidence of the governing bodies of the faculty, of the students and of the alumni, because of the loyalty, the entire absence of self-consciousness, the imaginative power and the intelligence, capacity and energy with which he approached his work. He had the full confidence of the public, for it was convinced, as soon as it knew the man, that he had the qualities of a good citizen and a great leader practically uncontaminated by any of the ordinary weaknesses of humanity.

His friends and those who had the good fortune to know him were attracted to him from the start by his fine character and by the richness of his personality, and found their respect and regard for him continually increasing as they knew him better. While his thought was al-

ways on his work and he was almost submerged by the intensity of his self-sacrificing and unsparing effort, he was always able, even at a time of serious exigency, to meet those with whom he came in contact with a friendly and personal charm, brightened by a sense of humor which he never seemed to lose even in his most serious moments. Every memory of him is pleasant and it is only from this pleasant memory that we who knew him can get even slight consolation for our great loss.

He was an admirable citizen. His standards of American ideals were of the highest. Many times he has served the public in large ways and small, often at great sacrifice and the expense of personal inconvenience. If his life had been spared, he would have continued to serve the community to the limit of his power, for he recognized to the full the obligations of citizenship.

When President Maclaurin came to Boston, he brought with him his wife who was born at the other end of the world. Her support in all the trying years of her husband's work as President of the Institute has been unflinching and most sympathetic. She has in many ways demonstrated the depth of her friendship for the Institute and her sincere devotion to its interests. To her and to his children we tender our hearty sympathy. It may comfort them to know that all the innumerable friends of President Maclaurin, many of them not even known to him, feel his loss as a personal and bitter calamity and only hope that their deep sympathy may to some slight extent alleviate the grief of his family. That common grief can be tempered only by the recognition, which is universal, that he lived a great life and leaves behind him a memory which of itself makes this a better world.

THE RESOLUTIONS FROM THE FACULTY

The committee appointed to prepare resolutions upon the death of President Maclaurin begs leave to report as follows:

For the third time in the history of the Massachusetts Institute of Technology, its faculty is called upon to mourn the loss of a President suddenly removed by death. Richard Cockburn Maclaurin, like his distinguished predecessors, William Barton Rogers and Francis Amasa Walker, has died in the very midst of self-sacrificing labors on behalf of the Institute.

Born in Scotland of distinguished ancestry, educated in New Zealand and in England, distinguished as an investigator and expert in Mathematical Physics and in the Law, acquainted by extensive travel with many and widely separated parts of the habitable globe, President Maclaurin was a man of extraordinary breadth, academic experience, and distinction, as well as a rare combination of a man of culture, a man of science, and a man of the world.

Dr. Maclaurin had no sooner accepted the Presidency of the Institute than he made a thorough study of its history and saturated himself

with its spirit and traditions. He recognized immediately its peculiar place and mission in the field of education, and gave himself unreservedly to its upbuilding and development. He found it endowed with a reputation for labor and achievement, and with an able and enthusiastic body of teachers, students, and alumni, but inadequately housed and imperfectly equipped. He quickly perceived its importance and its possibilities of increasing usefulness in a scientific and industrial age, and to its proper maintenance and development he straightway devoted all his powers of mind and body.

By his close attention to the history of the Institute, by his courage in the face of obstacles, and especially by his unremitting labors on its behalf, Dr. Maclaurin soon made himself virtually an Institute man. His loyalty to the Institute and to its spirit was complete. His efforts on its behalf, covering ten trying years, his absorption in its welfare, his absolute sacrifice of himself to its service, culminating in his death in the very hour of his triumph,—all these taken together constitute the highest tribute which could possibly be paid by any officer to any institution.

President Maclaurin had already made for himself an international reputation as a leader in modern education. His advice was sought by academic authorities from Europe to Australasia, and he looked forward with eager anticipation to a far greater development of the Institute in educational leadership and to its far larger service to mankind. Recognizing the high place of science in modern life and education, the potential fruitfulness of a close partnership between science and industry, and the importance of the applications of scientific knowledge to the conduct of human life, he was fully persuaded of the validity of the Institute's method of training, and of its ideals of breadth and thoroughness, as a means of attaining these ends.

Becoming a citizen of the United States by choice rather than by accident of birth, Dr. Maclaurin threw himself wholeheartedly into the great struggle of the war. He gladly turned over to the service of the Nation all the various resources of the Institute in its new buildings and location, and he had the reward of seeing that service hailed everywhere as unsurpassed. When the call came to him to go to Washington, he responded without hesitation and freely gave of his energy and of his wisdom to a difficult undertaking.

We tender to Mrs. Maclaurin and to his children our heartfelt sympathy, and we are proud to feel that we were permitted to share with them his extraordinary power of affectionate devotion.

For the Faculty:

WILLIAM T. SEDGEWICK,
DAVIS R. DEWEY,
HENRY G. PEARSON.

GENTLEMAN AND SCHOLAR

BY WILLIAM T. SEDGEWICK

IN the very year when Dr. Maclaurin was born President Rogers, because of advancing years and ill health, relinquished for a time the presidency of the young and obscure Institute, and when once more Rogers had been summoned to the headship, and made way for General Walker, Maclaurin was twelve years old. When General Walker died Dr. Maclaurin was twenty-seven, and when he was called to the presidency of the Institute he was only thirty-eight. And now after a little more than ten years of active, fruitful service Dr. Maclaurin has joined his great predecessors, Rogers and Walker, with whose names his will always be associated in the annals of Technology.

My first thought of Dr. Maclaurin is of his humor, for no matter how grave the issue, Dr. Maclaurin seemed always able to view the situation objectively and to look upon our complex human scene with amusement and tolerance. And next arises the image of a quiet, steady gaze, to which I can but believe Dr. Maclaurin owed a large part of the secret of his power. With penetrating glance he seemed to fix and hold a visitor, and behind that objective, searching look lay earnestness, simplicity and singleness of purpose such as one rarely sees. Yet over all other recollections rises the picture of devotion absolute and complete — devotion to his ideals, devotion to the question in hand, devotion to the Institute and its welfare, devotion to his family and devotion to technical education such as is rarely applied to any cause.

It is a singular and a reassuring circumstance that each of the three great presidents has come to the Institute from academic surroundings to become absorbed in and devoted to technical education. Rogers was a graduate of the ancient William and Mary, and had been a professor and at one time chairman of the faculty at the University of Virginia. Walker was a graduate of Amherst, and Maclaurin had been associated with one of the oldest universities of England. And yet each in turn was so persuaded of the significance and value of the education represented by the Institute that his devotion to it knew no bounds. And in a very true sense each sacrificed himself in the service of Technology and of technical education.

Dr. Maclaurin had no sooner come to the Institute than he proceeded to make a minute and thorough study of its origin and development, of its aims and ideals and of its proper and natural service to modern education. Feeling keenly the limitations of the more old-fashioned education in a New World, and enlightened by travel and residence in New Zealand and other portions of the globe remote from crystallized academic traditions, familiar with the marvellous developments of modern science, engineering and industry, and well aware that profound changes were inevitable and close at hand in all the aspects of human life, Dr. Maclaurin yet looked upon the modern world and saw it steadily

as well as whole. He believed that an educational establishment such as the Institute of Technology might well become a great scientific university, not narrow or strictly technical, but based upon history as well as science, and regardful of literature, language and art as well as industry.

He was, however, hampered in the development of his ideals by the poverty of the Institute, and realized acutely that in order to extend and develop along the right lines it must first have more than the usual academic resources. Hence for the time being he gave himself to its physical upbuilding, but those who knew him best knew also that his was no circumscribed vision but that his intellectual vision, hopes and plans ranged widely into the remotest branches of mental culture. A strong supporter of such studies as English, history and psychology, Dr. Maclaurin only a little while before his death was carefully considering how these subjects might be more richly provided in the Institute curriculum.

It is a great satisfaction to his colleagues to believe, as we have reason to do, that the last month at least of Dr. Maclaurin's life was a singularly happy time for him. By the first of December it had already become manifest that the great endeavor to accumulate \$4,000,000 with which to secure Mr. Eastman's magnificent donation of the same sum was certain to succeed, and those of us who from time to time saw Dr. Maclaurin noted with relief the easing of the burden which he had carried for a decade. Victory was clearly before him and a triumph such as any man might covet; some of the lines of care were disappearing from that still youthful face, and his perennial cheerfulness was even more in evidence. On the very day of his attack he greeted the writer with a cheery word and a smile as the latter left a message for him with his secretary.

No account of Dr. Maclaurin would be even approximately complete without reference to the range of his personal scholarship, of which it need only be said that in Mathematical Physics his distinction was such as to lead to his call from New Zealand to Columbia University in New York City to take the place of Dr. R. S. Woodward, who was so eminent in the subject that he had been chosen from all Americans as director of the Carnegie Institution for Scientific Research; while in the law competent authorities pronounced his learning, his reading and his library of the very first order.

It is often regretted among American men of science that first-rate investigators are seized upon for administrators, so that pure science is thereby robbed of its own. In this statement there is often too much truth, but who will regret that Dr. Maclaurin cheerfully abandoned the sciences of law and mathematical physics for the upbuilding of an institution which is universally regarded as the first of its kind in the world and which many believe is likely to be typical in its further development of the great universities of the future.

At all events, those of us who have been associated with Dr. Maclaurin will always be grateful for the sacrifice, if such it was, which he made in our behalf, and we firmly believe that those who have entrusted to the Institute through his endeavors so generously of their substance will not be disappointed, for it will be the strenuous desire and effort of those who remain to carry forward the Institute along the lines laid

down by Dr. Maclaurin and his great predecessors and to see to it that it rises in the future to the full level of its high calling. Only his most intimate friends knew what great plans our lamented president had for the Institute and its future, what high expectations, what far-seeing vision, and how confident he was that he could carry all these things through to their full fruition.

Ablly assisted by Mrs. Maclaurin, whose devotion to the Institute was in no wise inferior to his own, and whose efforts for co-operation and friendly intercourse among the women of the faculty and among the students have been always both eager and efficacious, the President's house on the Riverway was rapidly becoming a centre of Institute social life and student welfare, which must in the years to come have aided immensely in the development of student character and loyalty.

The death of President Maclaurin at this particular juncture is a tragedy, for he was not even permitted to tell the Alumni on Saturday evening last of the greatest achievement of his life. Some one has said that in this respect he was like Lincoln, who also fell untimely at the topmost summit of his fame.

Of a truth, Maclaurin's most conspicuous monument is, of course, the New Technology and its splendid home on the banks of the Charles in the centre of Greater Boston. But having himself been a professor and a teacher, he had also endeared himself in an unusual degree to those of the corporation and faculty who knew him well, and built for himself a place in their affection.

Unfortunately his necessary absorption with the problems of the Institute's physical life required his frequent absence from the Institute and even from meetings of the faculty, so that some of his colleagues were not intimately acquainted with the man. Those who were realized that a clear and powerful intellect was ceaselessly busy on behalf of the Institute and its upbuilding, both on the physical side and internally, directing whatever readjustment might be necessary to keep Technology in its high position of leadership in technical education.

So concentrated had been his efforts for the new site, the new buildings and their equipment that he seemed to some almost unregardful of the academic and pedagogic side. But it is an open secret that in this he was only taking the first step and making secure the foundations upon which he was about to build. He had deliberately turned aside from successful pursuit of the higher mathematics because this seemed to him too remote from ordinary human life and wanting in the human touch, for in spite of a reserve which at times seemed almost aloofness, and a silence which suggested the seclusion of the study, Dr. Maclaurin was a thorough going humanist and cared infinitely for the welfare of his fellow men. He was never the dull and solemn pedagogue, never the petty autocrat, bustling with importance and matters of little consequence. He was the friend of science as well of those who live in the spirit, and he might have said of himself as did William Harvey, "I avow myself the partisan of truth alone," and have added those immortal words of a more ancient writer, "Nothing that is human is alien to me."

— Reprinted from *Boston Evening Transcript*.

TESTIMONIAL AND RESOLUTION

By the Technology Club of New York

At the moment of the triumph of all his splendid endeavors for the Massachusetts Institute of Technology, it has pleased God in his wisdom to take out of this world, our honored President, Richard Cockburn Maclaurin. The Alumni, and the largest number of undergraduates in the history of Technology, have by him been drawn together closely, and are united in love and esteem for their beloved President.

We all mourn his loss, and we, of the Alumni of New York, represented in the Technology Club of New York, extend our sympathy and love to Mrs. Maclaurin and her children. Mrs. Maclaurin has ably and loyally aided in all the efforts and endeavors of our President in behalf of the Institute, and has been a friend to all Technology.

Coming to us at a critical period in the history of the Institute, our President has, by his able and ceaseless efforts, re-created Technology and established it with a splendid plant, on a sure foundation of scholarship and achievement. Financially he consummated, on the eve of his death, the Technology Educational Endowment Fund and the Technology Plan of Industrial Service which place the Institute securely in the path of future progress.

We love, honor and mourn his memory.

Be it therefore, resolved by the Board of Governors of the Technology Club of New York, that a copy of this testimonial be sent to Mrs. Maclaurin, to the Corporation of the Institute and to the Alumni Association, and that it be recorded in the minutes of this Board.

Dated: New York, January 16, 1920.

GOV. COOLIDGE PAYS TRIBUTE

GOVERNOR COOLIDGE on learning of the death of President Maclaurin said:

"The death of President Maclaurin means the loss of an eminent educator and a great citizen of our Commonwealth. He was responsible for the growth of Technology within the past few years and instrumental in erecting the new buildings for the Institute. He increased greatly the endowment of Technology. He was a leader, not only in educational affairs in Massachusetts, but in everything that made for good citizenship.

"He was a man of sterling character, greatly beloved by all people who came in contact with him, and always carried with him the respect and esteem of the entire community."

FROM HIS COLLEAGUES AND FRIENDS

PROFESSOR ROBERT H. RICHARDS, '68

As a member of Technology's first graduated class and a Professor Emeritus of the Institute, R. H. Richards '68 has written the following words concerning Dr. MacLaurin's death:

"A great man has gone from us. This is the feeling of all those who have known him personally and of those to whom he was only a name. His going is a great loss to those who had the good fortune to be near to him. He was always cordial and never too hurried to listen and help, and was full of good suggestions. His wide experience gave him many points of view.

"To Technology the loss is overwhelming, it seems irreparable. When he came to us ten years ago he grasped immediately the problems that were facing us and the school at once became his sole absorbing interest. He had no idea of overthrowing what his predecessors had done but simply of developing and amplifying it, thus securing the sympathy of the corporation, faculty, alumni, and students. Technology was poor and cramped for room and it could not grow and develop in the inadequate buildings it then occupied.

The first great task confronting the new president was to rebuild the school. His simple method and singleness of purpose in handling this great problem is delightful to contemplate. First a site was needed, but the money must be in hand to purchase it the moment it was chosen. These were acquired together. Second a design for the new buildings must be made. Third the money for them must be raised. Fourth the buildings must be erected, and finally the school must be endowed. While each of these stages was under consideration no other thought was allowed to interfere.

"At every step the difficulties were great, but his patience and perseverance surmounted all obstacles, and to his enduring credit he accomplished this with the increased admiration and friendship of all.

"The community has lost a great citizen, his interest in everything that pertained to the city and the community was strong. At the time of the policemen's strike and when the firemen were debating whether to strike, the Mechanical Engineering Department under Dr. MacLaurin's leadership organized a fire department ready to step in and save the city. The firemen concluded not to strike. His zeal in forming good citizens amounted almost to a passion as is evidenced by his talks to the students at the outbreak of the war. In the words of Governor Coolidge, 'The death of President MacLaurin means the loss of an eminent educator and a great citizen of our Commonwealth. . . . He was a leader not only in educational affairs in Massachusetts, but in everything that made for good citizenship.'

"His service to the whole country was great. He placed the entire school at the service of the United States Government when war was

declared. The 'Technology Plan,' whereby the technical knowledge of the Institute is placed at the disposal of the industries of the State and the country, came into being under Dr. Maclaurin's management.

"Finally, Dr. Maclaurin's mind was full of new ideas of ways and means of using Technology for the benefit of the city, the State and the country. We mourn the loss of this, but above all we mourn the loss of a dear friend."

HENRY P. TALBOT, '65

Professor Talbot, chairman of the faculty of Technology, has written as follows:

"In 1908 Dr. Maclaurin was elected to the presidency of the Institute, and in 1909 he was installed as its sixth president. He was already widely known for his scholarly attainments and his authoritative writings in physics, mathematics and the law; he had twice occupied administrative offices; he had both studied and contributed to the educational development of three continents. The Institute had had able presidents before, but none approached the office with so broad a background of experience, nor with greater promise of success.

"The task upon which he entered was exacting in the extreme. The Institute had outgrown its physical equipment of buildings and apparatus. There was much need within the Institute for permanent and courageous leadership, and a reconstruction of educational ideals. Dr. Maclaurin devoted himself to this task with singular calmness and good judgment. How successfully he accomplished it is evidenced by the splendid plant which the Institute now occupies, and by the increasing influx of students and the notable services which Technology's staff and alumni rendered during the war.

"Dr. Maclaurin's war service began in unostentatious ways from the moment war was declared, and he was later called to Washington to take charge of the unprecedented undertaking of rescuing the educational activities of the country from threatened chaos as the result of the drafting of most of our youth into national service.

"Again with his high sense of citizenship he threw himself into this new task with characteristic vigor and effectiveness, and there then began the excessive strain upon his energies which has culminated in his death. For, no sooner had the national demand for his services ceased, than he was confronted with new and most serious financial problems at the Institute. How splendidly he had succeeded in retaining Mr. Eastman's support, and how splendidly he rallied that of the alumni and friends of Technology, we all know. But, in the most literal sense, this success was attained at the sacrifice of his life. He has left a magnificent monument in buildings, and in an inspired instructing staff. It is a pleasure to recollect how much gratification he found in the generous response of the undergraduates to the appeal for the endowment fund.

"Crowded as his years at Technology have been with the burden of providing plant and endowment for the Institute, Dr. Maclaurin had constantly looked forward to the time when he might come more closely in touch with our students. Aided by the untiring loyalty of Mrs.

Maclaurin very much had already been accomplished, but he planned for more. It is but one feature of the present tragedy that he was denied this anticipated pleasure.

"To those of us who worked with him and under his leadership he was ever a friendly adviser and a source of inspiration. He was the embodiment of honor, gentle breeding, genial companionship, and effective and devoted service to his fellow men. His life and leadership will ever be a precious memory. Our gratitude can best be shown by earnest effort to make the best of the opportunities which his zeal for Technology has put at our disposal, and to make the Institute for which he gave his life greater and finer than ever before."

PROFESSOR WILLIAM T. SEDGEWICK, Senior Professor

"A cold, blustering Sunday morning of midwinter. Fine, dry snow blowing past the housetops and filling the chilled air with whirling veils of frozen mist. Across the blanched and motionless Charles the great Technology buildings stood solemn, cold, and gray in the eastern light. The white flag of Massachusetts flutters from their midst, but at half mast,—for the State has lost an adopted son; and like Rachael mourning for her children refuses to be comforted because he is not. Yet even as I look the sun comes out, blue sky appears, and fair weather clouds begin to sail the sky. The buildings brighten and though the flag flies low it shines bravely in the strengthening light, while the great gray buildings glow.

"The whole scene seems to me symbolic. Chilled with grief and almost blinded with sorrow, we yet find in the life just ended light to illuminate the path before us, and guidance toward the goal we must achieve. Dr. Maclaurin's life and work will be for us forever a shining example pointing toward the lofty heights of his ideals. His was a world career. No narrow limitations of his native Scotland hedged him in. New Zealand beckoned him, and he went. America called him, and he came. As a great man of science should do, he studied deeply, planned carefully, acted boldly. As a worker he was indefatigable; as a student, modest and profound; as a friend, faithful unto death. As a leader we shall not look upon his like again."

PROFESSOR DUGALD C. JACKSON

Spoken at the dinner of the Cornell Alumni, January 25, 1920

"When Mr. Walter spoke softly to me over the wire the other day, he made denial impossible by saying that I was to take the place of my friend and beloved chief, whose sudden death has cast a shadow of grief over the doors of the great educational institution on the banks of the Charles. It was easy for Mr. Walter to write my name in the place of 'Maclaurin'; I wish it were equally easy to write the word *accomplishment* alongside my name in those letters of royal gold with which they are written alongside of his.

"If I take Maclaurin for my text this evening, it is with full loyalty to Cornell, emphasized by the memory and obligation laid upon me by

the two years spent there as a young and relatively inexperienced graduate student in the middle of the decade of the eighties,—two years which I count the most profitable of any biennium of my life.

“An unselfish singleness of purpose and devotion, accompanied by honesty of practice was Maclaurin’s attribute in singular degree, and contributed largely to his success. His life, his influence, and his accomplishment are a new demonstration of the influence which those qualities more and more must hold in the world of affairs, equally as in the educational circles; and his qualities are a splendid example of the foundation afforded by a right education in letters and science. I say “letters and science” with emphasis on the word “science,” for it is this combination which gives the great mental qualities of quick inference combined with clear analysis. The observed results of such education have abundantly justified the act of Rogers in breaking from the traditional restraints of education in the middle of the 19th Century and establishing the Massachusetts Institute of Technology in order that education might be obtained in science but without overlooking letters. How hard the path-making out of the wilderness of educational diletanteism into the way of educational light has been impressed on us by the death in service of each of the three imposing presidents of the Institute of Technology, like Thurston of Sibley College, not one of them having lived to a full term of allotted years. Each has his monument. No young man of true human spirit can live four years or one year as a student under the pervading influence of the majesty of the graceful buildings on the bank of the Charles without feeling that effect upon mind and character which makes good citizens. In the hills, gorges and lakes of Ithaca, nature has excelled herself in preparing a magic seat for education. In the basin of the Charles and the buildings on its bank, man has designed an educational seat of rival charm, and this is the monument of Maclaurin.

EDITORIAL TRIBUTES

ALL of the Greater Boston newspapers have commented editorially on the death of our late President Maclaurin. Among the most noteworthy of these are those appearing in the *Boston Herald* and the *Boston Transcript*. Both papers have spoken of Dr. Maclaurin as one of the greatest educators in the United States as well as one of the foremost gentlemen and scholars.

The following editorial, under the title "President Maclaurin, the Man," commenting on the death of Dr. Maclaurin, appeared in the *Boston Herald* of January 17, 1920:

"Richard Cockburn Maclaurin had a genius for accomplishment. Quiet and unassuming, he displayed great qualities without either ostentation or eccentricity. He grappled with unaccustomed problems of finance and such was his facility of assimilation that he quickly became skilled in matters of financial administration. His keen sense of humor was suspected only by his intimates. His training and experience in Great Britain, New Zealand and the United States gave him a cosmopolitan quality that carried him over and through many obstacles and perplexities; some have declared that quality to have been 'his salvation.'

"His fellow-workers in Technology's cause soon learned to respect him, and their respect deepened into affection and quickened into enthusiasm. When he came here a stranger they found him a most sympathetic listener, absorbing their views rapidly, reticent as to his own, yet never giving offence by his silence. Seeming to have had comparatively little business experience, at Tech he was surrounded by men whose forte was finance; yet within a year they were saying capped by his lack of familiarity that he thought finance as though he were a financier by profession. He reached Boston by way of Scotland, Cambridge University and a 'down-under land,' knowing little of America, and it was supposed that he would be handicapped by his lack of familiarity with the country and the city, yet in a short time he seemed to know everything and everybody.

"He could 'reach' men. 'Inaccessible' New York business men received him and after an interview liked him and did what he asked. He had the knack, the art, of skilful letter writing. His letters, never too long, always shrewdly diplomatic, yet definite and pointed, often induced 'big men' to change their minds even when the alteration meant much trouble and expense. He was direct in his methods. In Washington when he was serving the government in war times they told him he never would be able to get to Secretary Baker, even though his subject was important, and he did not see the secretary, for Mr. Baker was out of the city; Dr. Maclaurin then quietly amazed his associates by going to the White House and at luncheon discussing and settling his problem.

"When he came to Tech great things were contemplated. He grasped the vision at once, made the vision his own, expanded it, and

then lived for it for ten years. He spared not himself. Never rugged, it was feared that he might break down at critical periods of his campaigns. Right through last summer he toiled, spending four days a week in town, and traveling to the extreme north of New Hampshire to spend a few hours with his family. He did not always have his own way, but when a conference decided against his hopes he would withhold his objections and leave them all unsuspecting, unless he were sure the time was opportune for a test.

"He was a lovable and able man. The entire country lamented him."

The *Boston Evening Transcript* published the following editorial about the late President Maclaurin on January 16, 1920:

"For all the shock of suddenness and for all the pain of swift and heavy loss inflicted upon this community and upon the whole world of education by the death of President Richard C. Maclaurin, still in these very qualities of the event there is, if not a softening of the blow, then an almost epic ennoblement of it. The great presidents of the Massachusetts Institute of Technology have all died in harness. To its founder and first president, William Barton Rogers, the call came, on May 30, 1882, without a moment's warning. It is true that for a brief time before, he had laid aside the formal cares of the school's headship; yet he died in the very midst of a Commencement Day address to students immediately his own, reared during his administration. So in 1897 came also the death of that other foremost man among the Institute's presidents, Francis Amasa Walker, in the full swing and toil of his service, and in the same bleak first days of January that are at present returned to us. And now Richard Cockburn Maclaurin, the only other man whose record entitled him to a place beside Rogers and Walker in the absolute forefront of Technology's annals, has taken his place beside them indeed, both in the manner of his going and in the height of his honor.

"It were folly to attempt any comparison among these three men. Without the contribution made by both Rogers and Walker, the story of the most recent years at Technology obviously could not have been written as it has been, even by the master hand of a Maclaurin. The dramatic sailing of the barge that bore the Institute's sixth president and his faculty, together with their charter and great seal, across the River Charles on a summer's night of 1916, would have been but a futile voyage had it not carried as freight also the accumulated experience and repute of a generation of labor and progress in technical education. The vast buildings on the Cambridge side of the river would have been empty indeed, had there not been at hand, as there was, a great store of finely established tradition wherewith to fill them. Yet even the preservation and maintenance of these intangible riches were largely the work of Dr. Maclaurin in the critical opening years of his leadership. He came to the Institute in 1909 at a time when their very survival, and certainly their prestige, were at stake. He husbanded them and he increased them. And more than any other one man he contributed first to clear comprehension of the vision of the shining new home where they were to be housed and given great new opportunities of service, and then to the actual realization of that vision in the stone and concrete, the mortar and steel, of the splendid plant on the Charles.

"The fame and force of the school as a teaching institution having been saved and strengthened, its material reconstruction having been largely accomplished, still there was to be no rest for its purposeful president. The financial demands of the Institute's future were pressing for supply with an urgency almost ominous. Upon Dr. Maclaurin fell a principal part of the responsibility for meeting them. Of the far-sightedness and the fine competence which he brought to this task, the news of the month, telling of the complete success of the financial programme which Technology set itself, has provided the best possible evidence. Of the effort and energy expended upon it by Dr. Maclaurin the news of today has shown the measure. They have cost him his life. No sacrifice upon the altar of any cause ever was more direct, no death ever more plainly the result of over-fatiguing, even though victorious battle by a devoted leader. Side by side with Rogers and Walker, on a level higher, if anything, than the high position they occupy, this Commonwealth and all the educational world will hold, in sorrow now, in enduring pride throughout the future, the memory of the sixth president of the Massachusetts Institute of Technology, Dr. Richard Cockburn Maclaurin, physicist, lawyer and administrator, intimately associated at various periods in his career with the academic life of three continents, self-sacrificing guide of America's greatest scientific school to what promise to be its greatest years."

HIS CONFESSION OF FAITH

The following address was delivered by Dr. Maclaurin last fall, at the anniversary of the Old South Church, at the request of its pastor, Dr. George A. Gordon. It discloses a side of his character not unexpected, but scarcely known to his associates at Technology.

Introducing President Maclaurin, Dr. Gordon said: "The next speaker is the President of one of the proudest possessions not only of the Commonwealth, but of the Country — the Massachusetts Institute of Technology. But I introduce him this evening as an honored and beloved member of the Old South Church, and he is to speak to us in the house of friends and to his friends."

The address by Dr. Maclaurin follows:

"This is an historic occasion and at such a time our thoughts naturally and properly revert to the past. Tonight I have more thought for the future than for the past, but it is for the future as it will be affected by the past, seeing that the roots of the future go deep into the past. This morning the curtain of the past was skillfully drawn aside at great moments in the life of the Church and of the community. Action, great action, was the centre of interest and we were fascinated not only by the action itself, but by the revelation of the human qualities of the actors — strength and frailty intermingled in bygone days as now. Tonight as a complement and contrast to this I shall deal not with action, but with *thought*. This I cannot present in the dramatic form that so entranced us this morning. What I ask you to consider is this — during the turbulent and eventful years of action that Dr. Gordon's sermon recalled so vividly to our minds, the great current of human thought has flowed on quietly — how has this current tended in the world at large and how has this tendency affected the Christian doctrine of life which, to this historic church, has always been the theme of paramount interest and importance?

"Just twenty-seven years before this church was founded, there was born in England of obscure parents an infant that at first appeared so frail that he seemed destined to an early death. Happily, he outlived this early frailty and in the vigor of his manhood did, perhaps, more than any other single man to speed the current of the world's thought in the realm of science. This was Isaac Newton. His science was, of course, related to the science of an earlier day, but his was one of the great master minds of the world and his contributions to scientific development gave such an impetus to science as to make the progress since his day incomparably more rapid and significant than at any other period of human history. The discoveries of science since this church was founded and the applications of science to practical affairs have so radically changed the conditions of men's daily lives that we face now a new earth and a new heaven.

"The growth of the scientific spirit has been the most notable human achievement since the days of Newton. As science has waxed the church in general has seemed to many to wane, and it has been too often assumed that this waxing of Science and waning of the Church are related as cause and effect, in other words that science and religion are by nature antagonistic. This is a view due primarily to the fact that the church has often stereotyped its creeds or based them on the authority of a book or a person or a group of persons, or uncritically accepted a tradition of miraculous interferences with the order of nature. The man of science is used to wonders, but they are wonders that are subject to law. He is suspicious of authority of any kind and his study of nature makes him extremely critical of any reported breach in the continuity of natural law. He is keenly alive to the fact that much of the history on which some of the dogmas of the Church were founded was written under circumstances that did not make for scientific accuracy in the record. He knows, too, that even the *unquestioned* facts of bygone days often demand a new interpretation in later ages. So it has come about that the growth of science has made impossible for thoughtful minds the retention of many historic creeds in the form in which they have been handed down. Science tries to build its creeds on experience and it realizes from experience that everything is changing. Science itself is changing and changing so rapidly that what is scientific orthodoxy today may be heterodoxy tomorrow. Similarly, people bursting with modernity today will be looked upon as old fogies tomorrow. Is there anything permanent behind these shifting forms? That is a great question for science and religion alike. If you arrive at the idea of some fundamental permanence it is easy to recognize that the form in which it is presented not only changes, but must change from generation to generation and from age to age. We were reminded this morning of the circumstances of the baptism of Benjamin Franklin, one of the great names on the roll of the Old South Church. He is often regarded as a pioneer of electrical science, but it is impossible to speak of electrical phenomena today in the language of Franklin and will doubtless be equally impossible a hundred years hence to speak of them in the language of today. So with religion — the fundamental phenomena are unchanged but the language you must use to describe them changes inevitably from age to age, and even if the words are the same their meaning is different.

"What, then, you may ask is the form of Christian doctrine that today is acceptable to the 'modern man'? If by 'modern' the man that writes and talks a good deal nowadays, the man with a smattering of science and other modern knowledge, who thinks that the intellectual life of the world began with the twentieth century, but may be willing to stretch a point to include a part of the nineteenth, the man that does not appreciate how profound has been the insight of pioneers of thought in ages long since past, the man that does not know the simple fact that if you estimate the achievements of the race by the intellectual powers of the few very great ones that have appeared (let me say) since Greek thought was at its height, there is no convincing evidence of any advance at all, and little to be said for the very modern, if this be the modern man that you have in mind when you ask what form of Chris-

tian doctrine is acceptable, then I say that it is a matter of trifling importance what is acceptable to him. He is a mere sophomore strayed from the ranks of the colleges, and no sensible man sits up nights pondering what is acceptable to such a person. If, however, by 'modern man' you mean the man who realizes that he is the heir of all the ages and must formulate a creed that is consistent with all that he has learned from others and all that he has acquired through his own experience, then your question is indeed a momentous one and demands a most serious answer. I should not, of course, presume to answer it now, even had I any fitness for the task. It presents far too complex a problem to be summarized adequately in a formula or disposed of in a fraction of an hour or in several hours. It needs to be presented from many points of view and applied to the innumerable problems of real life. It demands, indeed, just such an exposition covering months and years as we of the Old South Church are privileged in obtaining from the great preacher and teacher who has filled this pulpit so worthily for a generation.

"Although an adequate exposition of the creed of the modern man is a lengthy matter, although much that seems important to one generation loses almost all significance for another, and although the phases in which the doctrine must be presented to be acceptable to the 'modern man' of any epoch are necessarily changing, it is still true that underlying these changing forms are a few broad views that are essentially permanent and that constitute the essence of the Christian doctrine of life. These views will remain of vital interest and import as long as they satisfy the deepest needs of man. They are two in number: First a view of the possibilities and the worth of the individual man, a view that gives dignity to the human struggle however sordid its conditions; and the second a view of the right relations of man to his neighbor, a view that supplies an impulse and a guide to social action.

"Surely there never was a time when this tragic world needed the Christian doctrine of life more urgently than now. Look at the individual. Pettiness and sordidness, muddle and failure surround him on every hand. Grossness and wickedness are rampant, the war having revealed their unfathomable depths in new and dramatic forms. These are facts that the modern man must face, and if he cannot accept a Christian view of them he is often driven to the conclusion that man lives like an animal, loves like an animal, and dies like an animal. This doctrine that man is a mere gain-seeking animal preying upon his kind may be held by a few individuals without much apparent result, but what happens when it becomes the real creed of a people or of the dominant section of a people, we see before our eyes today in the tragic spectacle of despairing Russia.

"And if you look away from the individual to communities and nations the urgent need of a Christian doctrine of life is equally apparent. In many countries the most significant social movement today is based, at least in part, on a doctrine of hatred and we see at our own doors men and women striving, almost with religious fervor, to set class against class and group against group. Nor is the present generation likely to forget the awful spectacle of a mighty nation encouraging itself by hymns of hate to war pitilessly on the innocent and the defenceless,

and in the name of humanity giving itself up to a veritable orgy of hatred of other peoples.

"I have spoken of changing forms and of the fact that much that appeals to one generation is repellent to another. This historic church took its rise in Puritan days and we have since traveled far from Puritan ways of thought and action. Modern science, however, although it could hardly use the language of Puritanism, finds itself in some fundamental matters much more in accord with Puritan ways of thinking than with those that have since supplanted them in popular esteem. Puritan doctrine was abandoned largely because of its gravity and its sternness, but that is just the aspect of it that appeals to the man of science. He can have no sympathy with the easy-going optimism that has long been popular in our midst, due perhaps in part to a reaction from the excesses of the Puritan regime. The popular view is not definitely formulated, but if it were it might take some such form as this: 'Do not trouble much about good or evil, about falsehood or truth. In almost everything human these things are intermingled, good being not very far from evil, nor wisdom from folly, so that one man's opinion is almost as good as another's. Things will somehow all come out right in the end, and in the meanwhile we cannot do better than encourage all to shout forth their views and settle the issue by counting heads.' To such a creed the modern man, imbued with the spirit of science, is unalterably opposed. To him truth and falsehood, good and evil, are as distinct as were God and the Devil in the mind of the Puritan. The root principle of his scientific creed is to base everything on the solid ground of fact. He cannot, as so many do, overlook facts simply because they are unpleasant or discordant with his theories or his preconceived ideas. Amongst the facts that cannot escape him except by a deliberate closing of the eyes, is the fact of the awful consequences not only of wickedness but of mere error. More and more, as he investigates nature, he finds all things ruled by laws that are never relaxed, and the punishment for ignorance of these laws seems to him to be as certain as the punishment for their deliberate breach. He cannot, therefore, be an easy-going optimist, and whatever be his hopes or fears as to human destiny, he cannot but bestir himself to know the truth and live in its light. Nor can he view with equanimity the spread of pernicious doctrines of any kind whether these doctrines be economic, political, social, or religious. He must do more than deplore them; he must do his best to combat them. Non-resistance to evil is unthinkable to him, and amiable tolerance of human frailty and folly is almost the unpardonable sin.

"Let me touch in closing on the revival by the modern man of interest in the ancient doctrine that man is saved, if at all, by devotion to the church. It is a doctrine easily distorted to base uses. In the crude forms in which it has often been presented it has been the source of some of the gravest evils that history records. Needless to say that in such forms it is abhorrent to the modern man, and it is impossible to believe that it will ever again become acceptable. Devotion to the church in the sense in which it interests and attracts thoughtful men today means primarily devotion to the spiritual community of the Church Invisible. This is the community of all those who are loyal to the great ideals of Christianity whatever be the form in which they choose to present those

ideals, whether Catholic, or Protestant, Orthodox or Heterodox, "old fashioned" or "modern." There may be no relation at all between this spiritual community and the visible church of our daily experience, but if there be no such relation, then, of course, the visible church is a sham. easy and cheap it is to point out how far this visible church falls below its ideal; easy and cheap to belittle its achievements and enlarge upon its failures. The only thing worth doing is to bring it nearer the ideal and the modern doctrine to which I have referred suggests that man is saved, if at all, by his effort to do this. So this doctrine runs — devote yourself to your church with unwavering loyalty, strengthen it by all the means in your power; keep it from a mere conventional faith, and strive without ceasing to bring it closer into accord with the Invisible Church of which it should be the counterpart. There lies the great task and the great hope. The end for the individual is salvation and for society the maintenance of civilization itself. These are dark days in the history of the world when men's hearts are failing them for fear. And they may well fear, for civilizations — highly prized civilizations — have disappeared before now and ours may disappear as others have done. Let us have no illusions. One thing is certain. Civilization will not be saved by flabby optimism nor by irresolute good-will. It needs the virtues of the warrior and the call to its service is even more pressing now than ever was the call to arms. It is the call for alert and strenuous loyalty to the great ideals of the Master."

A FORCE FOR FRATERNITY

It is not too much to say that men in all parts of the world will be shocked as they read today of the death of the great president of the Institute of Technology, Richard C. Maclaurin. It was but a day or two ago that the news that he was seriously ill appeared in the papers. He had been sick only since Saturday. Consequently the world was ill-prepared for the tidings that he had finished his splendid work on earth.

To say that the passing of this great executor, this inspiring leader, this builder of a still greater institution upon the foundations of one already great, will be a loss to Technology to be measured only as time still further gives us more background of estimate, is to speak a truism. Under his wise and strong administration the institution solved hard financial problems that were pressing upon it; moved out of its old and totally inadequate shell to the splendid home across the Charles and began a career of widely increased usefulness whose magnitude is only just being suspected. And, perhaps of more value still, through him were loyalty and fraternity among "Tech" students and alumni brought to a higher degree of warmth than ever before.

The community as well as the powerful Institute to which he gave such devoted service will miss President Maclaurin. His was a force exerted on many sides of life. He made an impress upon his world that will last long.— *The Boston Post*.

DR. MACLAURIN'S LAST MESSAGE TO TECHNOLOGY MEN

On the evening of the Alumni dinner, January 10, it was announced that Dr. Maclaurin was ill with pneumonia and could not appear. The speech he had intended to deliver, telling the story of his ten years' work which culminated that evening in the announcement of the identity of Technology's benefactor, was read by Professor Sedgewick.

This, our late president's last message to the alumni and undergraduates and friends of the Institute will have, apart from its pathos, historical interest of the first importance in the long story of Technology's accomplishments.

This is an occasion for general congratulations to the great host of Technology men throughout the country and to the even greater army of Technology's friends outside the circle of the alumni. The campaign for endowment has gone forward according to schedule and within the time limit set we are over the top and have secured the eight million dollars that we set out to seek. Most of the leading colleges in the country have embarked on similar campaigns. We, I believe, are the first to have won complete victory and I hope that our success will encourage and strengthen all the others. Many men and many minds have contributed to this great accomplishment, notably, of course, the members of the committees of the corporation and of the alumni. A very special meed of praise is due to Mr. Emerson and his able and enthusiastic assistants. We must not forget, too, how much is due to work done quietly and effectively all through the country by loyal sons of Technology, men who have put business and pleasure aside and worked wholeheartedly for their Alma Mater.

Where so many have contributed to a great result it might be invidious to single out a few names, and yet with your permission I am going to say a few words with reference to the special contributions that have been made by three of the Institute's supporters. These three men are in some ways strikingly different in temperament, in training, and in experience, but they have at least one great quality in common — a largeness of vision, a belief in doing things thoroughly, and a determination to carry things forward always on a broad gauge. Their attitude towards Technology should encourage all its friends to have the highest view of its character and destiny and to make it one of the greatest factors in the nation's welfare.

The first of these is the President of the Alumni Association, Coleman du Pont. I hope that Technology men will never forget how large a part he has played (always with characteristic modesty) in the development of the Institute. When I first came to Technology and had had time to take observations I found that the Institute was in the doldrums. It wanted to move but couldn't get a move on. It was clear

that some one was needed to give a real push and so, after consultation with my colleagues, I went to describe the situation to Coleman du Pont. That was nine years ago, but I remember the incidents of my visit as if it had happened yesterday. I arrived in Wilmington early in the morning and although du Pont was at that time a very sick man he was up to greet me and greeted me cheerfully. We got to business immediately and it was all settled in ten minutes. I described the broad features of our condition and said that we must move to a new site. He asked what sites were under consideration and wanted a brief description of each. The first one I mentioned was twenty-five acres in area. He said "Can't you double it?" and I said "Not this particular site." "Well," he said, "I don't like the look of twenty-five acres. It seems to me too small. Almost invariably when a man comes to me to approve plans of a new factory (Mr. du Pont was then President of the Power Company) I tell him to double the size of everything and almost invariably I wish afterward that I had used a larger factor of safety. Technology will occupy a great position in the future and must have room to grow. I don't feel much attracted by twenty-five acres, but I should be interested in fifty." I agreed with his policy, but told him, of course, that the main obstacle was cost. "What would fifty acres cost?" he asked. I told him "Three-quarters of a million," and he said that he would contribute half a million. That was the egg from which so much has grown within the last nine years.

The second man is "Smith." It is not likely that I shall forget the main incidents of my first visit to him nearly eight years ago. Early in 1912 the Institute had secured options on its present magnificent site of fifty acres bordering on the Charles River Basin in the heart of Greater Boston. At this time I visited the principal of Mr. "Smith's" plants. Mr. "Smith" himself was away but I met a number of leading men in his business and spent a day in looking over the plant. I was greatly impressed with the evidences on all hands of interest in scientific methods, by the number and high quality of the scientific men who were employed not only as technical experts but as executives, and by the careful plans that were made for utilizing scientific improvements at every stage of the Company's growth. This evidence of high intelligence everywhere and of appreciation in an unusual degree of the value of scientific men suggested to me that Mr. "Smith" himself might be interested in Technology. Consequently, on his return I wrote to him telling him something of our problems and indicating that I would welcome an opportunity of explaining them more fully at a personal conference. He replied suggesting a date for our meeting and we dined and spent an evening together in New York going over the whole matter carefully and making the best estimates that were possible at that early stage as to the probable cost of the various portions of our undertaking. At this meeting, as at many another since, I could not fail to be impressed with Mr. "Smith's" capacity to go to the heart of a problem quickly and see immediately what the main points are and to keep to those points in later discussion. He was interested in Technology's problem, but made it clear that his continued interest would depend on its problems being attacked in a bold way and in a liberal spirit. He, like Mr. du Pont believed that Technology had only to embrace its destiny to rise to a

position of transcendent usefulness and his only anxiety has been lest at any time narrower views should prevail. He has, as you know, been extraordinarily liberal towards the Institute, always ready to help it in any important forward movement. He likes things done well, but does not think they are well done unless they are done economically. On the occasion of the dedication of our buildings in 1896 he said: "I heartily congratulate the Corporation and you not only upon the broad-mindedness but upon the conservatism and economy with which the building plans have been carried out. Naturally, I feel great satisfaction in being instrumental in helping you to carry out such far-seeing plans for the development of the Institute, as I feel very strongly that the progress of this country is to be affected greatly by the men who are turned out of the M. I. T."

The third man is Rogers,— William Barton Rogers, the first President and real founder of the Institute. Technology men generally, although they hold Rogers' name in reverence, do not appreciate sufficiently how much the Institute and the world owe to him. A prophet is not without honor save in his own country and before the war I learned from high technical authorities in Germany how much Rogers' early contributions to the theory and practice of higher technical education were appreciated in Germany. According to one authority there, the extraordinary development of industry in Germany depending so largely on scientific applications was due more to the ideas that the American Rogers expounded in the early days than to those of any German. The most striking thing about Rogers was the breadth of his vision and the large view that he had of the Institute's place in the industrial development of America. It was, of course, a very small thing in his day, but he looked forward with clear vision to its future growth. Observe that he saw the Massachusetts Institute of Technology as much more than a school of industrial science and that he had incorporated in its charter a statement that it was founded for the purpose of instituting and maintaining a school of industrial science and "aiding generally by suitable means the advancement, development and practical application of science in connection with arts, manufactures and commerce." It may seem a far cry from Rogers' day to the so called Technology Plan about which there is much discussion and some controversy in those days. I hope, however, you will agree that the Technology Plan is a natural outgrowth of Rogers' conception of the Institute and that it presents today one of the "suitable means" whereby the Institute can aid "the advancement, development and practical application of science in connection with arts, manufactures and commerce." The fundamental idea of the Technology Plan is that although the primary purpose of Technology is to train men, Technology itself is much more than a school. Physically, it consists of a vast group of buildings with an extraordinary variety of technical equipment representing almost every branch of applied science outside the field of medicine. On its human side it consists of a notable group of professors and instructors, between three and four hundred able men competent to deal with the immense variety of scientific knowledge comprised within the limits of the Institute's courses, a great group of students over three thousand in number coming to Technology from every part of the United States and of the

world, and an army of alumni over ten thousand strong, rich in experience and power. This, I say, is the Institute and the purpose of the Institute as Rogers expounded it was to "aid generally by suitable means the advancement, development and practical application of science." The Technology Plan enables the Institute to do this by setting up the right kind of organization to give industrial corporations the information that they want regarding men and scientific processes that are applicable to their industry. A mere school might not be able to do this, but an institution conceived so broadly as Technology is well adapted for this great end. This is not the time or the place to discuss the plan in detail but I cannot refrain from referring to two criticisms that are current with reference to the Plan. One of them is that the Technology Plan calls upon industrial corporations to pay for services that they have hitherto obtained gratuitously. The answer is that the Plan does not do this. The kind of service that has hitherto been rendered gratuitously will continue to be so rendered. There is, however, a real difference between service rendered gratuitously and haphazardly and service rendered in a business-like way, and the Institute is, of course, bound to see to it as a matter of business that the corporations that pay for service get a fair return for the payments that they make. As you know, Technology is setting up a business organization to tender this service and has placed one of its most effective officers, Dr. Walker, in charge of this very important branch of its activities. Dr. Walker, will, of course, surround himself with an able band of assistants.

The other criticism of the Plan is that it encourages the Institute to encroach upon the field of private practice of its alumni. Coleman du Pont has answered this criticism by saying that if any Tech man has made such a criticism he must be a poor specimen of the breed, for the real Tech man has no fear of competition. My own view is that any such criticism as is here suggested is based on a narrow and unsound analysis of the facts. It is based on the same economic theory as that of the labor unions that believe in limiting competition and restricting output. I believe that this is bad policy on the part of the labor unions and what is bad for the labor unions is bad for Technology graduates. All the broader and more experienced Technology alumni with whom I have discussed this matter take the view that the Institute's alumni will greatly benefit by the success of the Technology Plan. They realize, of course, that the service that the Institute can render directly through its staff is but an infinitesimal fraction of the total technical service that the country needs. They believe, further, that the more that industrial corporations are brought to appreciate the advantages to them that come from attacking their problems in a scientific way the greater will be their demand for the services of highly trained men.

I seem to have wandered a long way from the subject with which I began and in the short time that remains to me I must return to Mr. "Smith." Nearly eight years ago when he made his first great gift of two and one-half millions to Technology he expressed the wish that his name be withheld. He is a man who instinctively wishes to avoid all fuss and prefers to do things quietly and unostentatiously. He gets infinitely more satisfaction in doing things than in having people talk about them. He would prefer to remain anonymous, but the great gift

that he has just made to Technology has been made by transferring to the Institute stock that he owns in the Company that he directs. The annual report of the Treasurer of the Institute has to be published and in this report the assets of the Institute must be listed so that it could only be a short time before Mr. "Smith's" identity must be revealed. Knowing how much pleasure it would give Tech men to be told at this time who he is, Mr. "Smith" has consented to a public statement tonight regarding his association with Technology. You will remember that the announcement of Mr. "Smith's" first gift to the Institute in 1912 started a great guessing competition that ran the rounds of the newspapers of the country and that this competition has been revived as a popular pastime on every occasion when another substantial contribution from him to Technology has been announced. At the time of the dedication of our new building suspicion centered on two New York millionaires each of whom strongly suspected the other. It is said that they dined together to have it out, but separated without having discovered any secrets and with enlarged respect for the bluffing powers of the other. As a matter of fact, neither was Mr. "Smith." In another center a man, not Mr. "Smith," claimed to be he and in still another a woman made it known to her friends that she was certain that Mr. "Smith" was her husband, although here she was in error.

The secret has been kept for nearly eight years. Latterly a good many have been told and now I am glad to reward Technology alumni for the manner in which they have responded to Mr. "Smith's" offer by removing all doubt as to his identity. I am often asked a recipe for keeping a secret. It is, after all, very simple. Tell it to no man and to very few women. I have told it to two — my secretary, Miss Miller, and my wife.

The End.



GEORGE EASTMAN
"The Mysterious Mr. Smith"

GEORGE EASTMAN

It had been our intention to make this a number of rejoicing, of congratulation and of thanks. We were to have dedicated it to the Mysterious Mr. Smith and to have fulfilled our promise of the November issue by printing George Eastman's picture in the place of honor.

That place of honor is given to our dead president.

But when sincere honor is done the dead, the same sincerity owes it to the living.

In this issue, therefore, we give our thanks to George Eastman of Rochester whose past gifts made possible the new Technology and whose latest gift made possible an adequate permanent endowment. The story of the great endowment fund campaign and its results will be printed in full in the official report which is being prepared for the April issue of THE REVIEW. In this issue, however, the most important article deals with the new "Technology Plan," so called, the creation of the Division of Industrial Co-operation and Research, which will administer the organization, to create which over a million dollars have been paid to the Institute for services to be rendered. The article, prepared under the direction of the head of the new work, Dr. W. H. Walker, merits the most careful reading. It marks a new step in the development of Technology as an instrument of national service.

George Eastman can sympathize with us in our great loss, as only one of us can sympathize. It was through Dr. Maclaurin that he became one of us, that he saw the purpose of our work and was moved to help us. The figure that inspired him to great generosity and greater faith is lost to us, but we can hope that Mr. Eastman may still have faith in Technology, may still see us through those keen, candid eyes to whom the vision of our future was so plain, so apparent, that he led other men to view it with his own confidence and his own hope.

Mr. Eastman made his great gifts for us anonymously, without ostentation. He is not a man to ask for thanks or for eulogy. He gave to us quietly and practically. Let us thank him as quietly and as practically. His faith asks only for our works.

The use Technology makes of his generosity will be our thanks and will prove to him and to the world that the vision of our president, who fell as he gave the order to advance, was not a dream but a prophecy.

THE TECHNOLOGY PLAN

THE most important result of the successful campaign for the Educational Fund is undoubtedly the inception and the development of what we are proud to be able to call the Technology Plan, the first complete scheme ever worked out by a technical institution for co-operation between a school of pure and applied science and the industries dependent upon this science.

It is but the logical development of the intention and practice of the Institute which has obtained for years. The germ of it can be seen in the original prospectus of William Barton Rogers as to the future scope of the Institute's work; the engineering and scientific experts on the instructing staff have long been proving its usefulness, but individually and unofficially, so to speak, and in recent years the co-operative course in electrical engineering and in chemical engineering has pointed the way.

The plan is, briefly, the establishment of a new division of industrial co-operation and research under an able director who shall draw into focus all the Institute's ability in research, consultation, scientific and industrial experience and creative aptitude, for the service of industrial corporations who shall "retain" the right to that service, as a corporation retains the services of a legal expert, by the payment of an annual fee. For this fee the new division will secure for the Institute's clients whatever help can be obtained by consultations with the special experts and departments that are in touch with the client's problems, the planning of new researches and necessary industrial procedure, the forming of a "liaison" between the client and the knowledge it needs, whether of men or processes, the use of the Institute library with competent assistance, and in some cases, the use of the physical resources of the Institute, such as laboratories, etc. It must be understood, however, that the Institute cannot undertake, in general, to carry on unlimited research or experiments through its own staff and in its own laboratories. Such an undertaking would swamp the school and leaves little time or place for the chief functions of the school.

It undertakes rather to act as the source of necessary information, to act as a clearing house for scientific, technical and industrial problems, to give the client in doubt an exact idea of the extent of his difficulties, the chance of his success, the work done on similar lines in the past, and the resources, particularly in competent men, existing at present. It aims to bridge the gap between the school and the factory, between the idea and the process.

To date contracts have been signed for the Technology plan by over one hundred and eighty corporations, their retaining fees amounting so far to well over one million two hundred thousand dollars with more coming in. The Plan is successfully launched and will continue to be an integral part of the Institute's work for the future until a large and powerful division of research and co-operation, the first in America, is

built up. It is therefore necessary to note that although in the first instance the plan was devised as a means to increase the Educational Fund, to supplement the private donations, the limit of which, the committee saw, would soon be reached, and although it was adopted with no little hesitation and concern for the dual purpose of offering a means whereby corporations might be able to help the Institute financially under the law, and at the same time enjoy the benefits accruing from such close contact with the Institute, the welcome the Plan received, the instant success of those soliciting for it and the size and the aggregate of the retaining fees, made it clear that the Plan was of far greater value than had been at first perceived and that its possibilities for scientific education were unbounded.

The Educational Fund Campaign therefore has given the Institute eight millions for permanent endowment *plus* The Technology Plan, in itself a permanent endowment both financial and educational, the full possibilities of which have only begun to be seen.

ORIGIN OF THE PLAN

The origin of the Technology Plan was as follows:

When it became obvious that the \$4,000,000 required to meet the conditions of Mr. Eastman's offer could not be obtained by gifts alone, the Committee cast about for some means by which a large sum could be earned. Two plans already in active operation on a modest scale at the Institute offered possibilities in this direction. These were, first the co-operative plan which the American Telephone and Telegraph Company enjoys with the Institute, by which the Company contributes the sum of \$15,000 annually for research work of a general character in the Department of Electrical Engineering, the return to the Company taking the form of trained men available for the electrical industries of the country.

The second is the plan so successfully followed by the Research Laboratories of Applied Chemistry, by which research work of a special nature is carried on for industrial organizations for cost plus 100%. The money represented by the overcharge forms the endowment of the Laboratory and is used to finance research in fundamental or pure science, and published *pro bono publico*. In addition there was the fact that since its organization the Institute had constantly contributed to the industries of the country by rendering gratis consulting advice of great value. While it will continue to so serve the community, it was thought that the good will might be capitalized; that all companies would be willing to pay for such service rather than take it without some form of remuneration (which conclusion subsequent experience found to be correct.)

Mr. Edwin S. Webster aided in the crystallization of the idea by pointing out that one of his subsidiary companies had aided the Georgia School of Technology by contracting with it for certain services which it was well able to render, in return for a substantial contributed sum. Valuable experience accumulated by Mr. Jasper Whiting while president of the Alumni Association in his plan for enlisting the support of the State of Massachusetts was also utilized.

DIVISION OF CO-OPERATION AND RESEARCH

DR. WALKER and Arthur H. Stubbs therefore were appointed a Committee to investigate this subject and to see if some such similar plan could be worked out for our institution. They drew up a tentative report, and then held a meeting of certain members of the Faculty on October 21, at which time the subject was discussed. Later on, October 24, the matter was taken up in further detail with members of the Alumni Committee. All with whom the matter was discussed agreed that some such plan is entirely feasible and practical.

2. Plans of operation were suggested by Dr. Walker and Mr. Stubbs.

The first plan was a form of contract under which the corporation would retain the Institute and would receive those facilities and services which are now available, for example, (a) free use of the laboratories at proper periods; (b) free use of the remarkable library of the Institute; (c) opportunities to confer with professors; (d) preference on thesis work investigation by the students; (e) opportunity in hiring Technology men.

The second plan suggested was a form of contract under which corporations could retain the services of the Massachusetts Institute of Technology in a much broader sense.

This retainer fee would be just what its name indicates, in other words, a stand-by charge. The work or problems submitted to the Institute for solution would be paid for in addition at rates dependent upon the equipment, labor and materials involved.

In short, the Massachusetts Institute of Technology would become the greatest consulting body in the world, since its range would cover practically every field of technical research and would include problems of Civil Engineering, Mechanical Engineering, Electrical Engineering, Chemical Engineering, Architecture, Naval Architecture, the different special branches of Physics, and Chemistry, Economics, Finance, and all problems that have to do with public welfare or the public health.

It was not believed by those with whom this subject has been discussed, including among others such men who are doing outside consulting work as Professor D. C. Jackson and Dr. W. H. Walker, that the creation of such a division would in any way tend to commercialize Technology or that it would cause complaint of competition on the part of consulting engineers. These men believe that the problems which Technology would naturally investigate owing to its great equipment and resources would be those which no engineer could properly undertake; and they further believe that the field for research is so large that it is impossible for the present agencies to in any way completely cover it.

The point was raised by them that as far as what might be called the commercial side of this question is concerned, it could be stated that institutions such as Technology should be aided by the State or the Federal Government, and that the result of all such researches should be given to the world without cost. This, in substance, was the argument used by Technology in asking for a continuation of State aid and for closer co-operation with the Commonwealth of Massachusetts. However, it is now known that no further aid can be expected from Massachusetts, and further, under any such arrangement as was pro-

posed it would, of course, be impossible for the great corporations of the country to have Technology do work for them in their own particular field.

It has been suggested that if the great corporations of the country should retain Technology, it would follow that the great experts of the country ultimately would be at Technology and therefore Technology would not only add greatly to its yearly income, but because of the prestige of its experts it would receive additions in the same way to its instructing staff. It will be agreed that logically the greatest experts in technical industry should be members of the instructing staff.

Looking at this subject in its broadest aspect, it would seem that there should be worked out a plan by which Technology could become the Consultant to New England if not the Consultant to the Nation, and that this, which might be called the Technology plan of education, might change the present status of technical schools and colleges and permit them not only to become self-supporting, but also to be of far greater service to industry and to the nation.

This idea of course in itself is not new, it was suggested in a somewhat different way in connection with the State Aid Campaign for Technology and it is followed in a somewhat similar way by certain state institutions in the middle west and by European Institutions.

COPY OF THE CONTRACT

AGREEMENT made this (blank) day of (blank) 19... between (blank), hereinafter referred to as the Company, and the Massachusetts Institute of Technology.

The Company agrees to pay to the Massachusetts Institute of Technology a retainer of (blank) Dollars, in five annual installments of (blank), payable on the second day of January of each year from 1920 to 1924 inclusive.

The Massachusetts Institute of Technology agrees to make available to the Company, during the five years 1920 to 1924 inclusive, its library and files, and to arrange for conferences with its technical staff on problems pertaining to the business of the Company.

The Massachusetts Institute of Technology further agrees to maintain a record of the qualifications, experience and special knowledge of its alumni that shall be as complete as practicable, and upon request to advise and assist the Company to obtain:

Information as to where such knowledge and experience are available.

Information regarding men for special problems.

Information regarding men for permanent employment.

The Massachusetts Institute of Technology further agrees to maintain a list of undergraduates who may wish positions upon graduation; to advise the Company upon request as to the records and qualifications of these men, and to arrange for interviews with them.

The Massachusetts Institute of Technology further agrees that in case the Company at any time during the period covered by this contract should have special technical problems requiring extended consultations, investigations, tests, or research work, it will advise the Company where this service can best be obtained. If, in the judgment of the

Massachusetts Institute of Technology, this service can best be rendered by its staff or in its laboratories, a member of its staff shall undertake such service for a fee to be mutually agreed upon by the parties hereto.

By _____

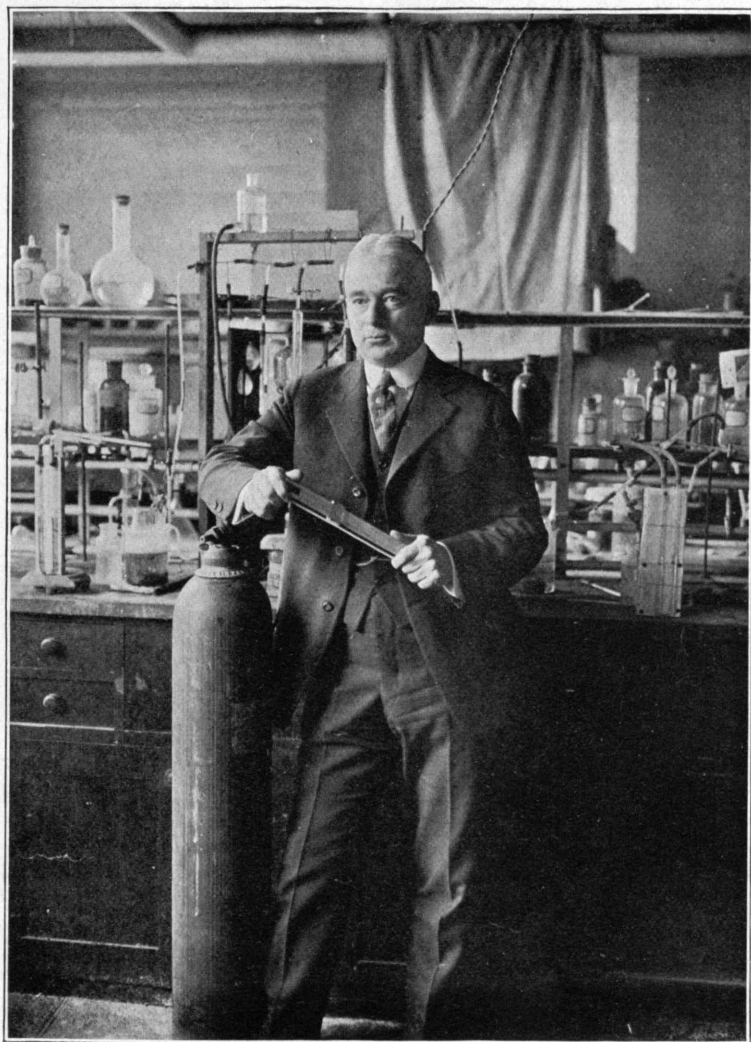
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

By _____

CHARTER MEMBERS OF THE TECHNOLOGY PLAN

The following is the list of contracts signed with the Institute up to February 20, 1920.

The Aberthaw Construction Co., 27 School Street, Boston, Mass.
 Albany Felt Co., Albany, N. Y.
 American Bosch Magneto Corp., Springfield, Mass.
 American Car & Foundry Co., 165 Broadway, New York City.
 American Chain Co., Inc., Bridgeport, Conn.
 American Cotton Oil Co., 65 Broadway, New York City.
 American Glue Co., 121 Beverly Street, Boston, Mass.
 American International Corp., 120 Broadway, New York City.
 American Optical Co., Southbridge, Mass.
 American Printing Co., Fall River, Mass.
 American Radiator Co., 1807 Elmwood Avenue, Buffalo, N. Y.
 American Radio & Research Corp., Medford Hillside, Mass.
 American Steel Foundries, McCormick Bldg., Chicago, Ill.
 American Tel. & Tel. Co., 195 Broadway, New York City.
 American Woolen Co., 245 State Street, Boston, Mass.
 The Amos Bird Co., 72 South Market Street, Boston, Mass.
 Angier Mills, Framingham, Mass.
 The Angus Co., Ltd., P. O. Box 5173, Boston, Mass.
 Arnold, N. N., Shoe Co., North Abington, Mass.
 Arnold Print Works, North Adams, Mass.
 Avery Chemical Co., 88 Broad Street, Boston, Mass.
 The Babcock & Wilcox Co., 85 Liberty Street, New York City.
 Badger, E. B., & Sons Co., 75 Pitts Street, Boston, Mass.
 Baker, Walter, & Co., Ltd., Dorchester, Mass.
 The Beckett Paper Co., Hamilton, Ohio.
 Bemis Brothers Bag Co., 40 Central Street, Boston, Mass.
 Berkshire Cotton Manufacturing Co., Adams, Mass.
 Bethlehem Shipbuilding Corp., Ltd., South Bethlehem, Pa.
 The Blanchard Machine Co., 64 State Street, Cambridge, Mass.
 Boott Mills, 79 Milk Street, Boston, Mass.
 Borden & Remington Co., Fall River, Mass.
 The Borden, Richard, Mfg. Co., Fall River, Mass.
 Boston Insulated Wire & Cable Co., Dorchester.
 Boyd, John S. Co., North Adams, Mass.
 Brown Co., Berlin, N. H.
 Buffalo Bolt Co., Buffalo, N. Y.



DR. WILLIAM HULTZ WALKER

Director of the New Division for Industrial Co-operation and Research

Buffalo Foundry and Machine Co., Buffalo, N. Y.
Calumet & Hecla Mining Co., 12 Ashburton Place, Boston.
Chandler Motor Car Co., 131st Street, Cleveland, Ohio.
Chase & Sanborn, 200 High Street, Boston, Mass.
The Benjamin Chase Co., Derry Village, N. H.
Cheney Brothers, South Manchester, Conn.
Chicago-Cleveland Car Roofing Co., 535 Railway Exchange Building,
Chicago, Ill.
Chile Exploration Co., 120 Broadway, New York City.
Churchill & Alden Co., Campello, Mass.
The Cincinnati Milling Machine Co., Cincinnati, Ohio.
Commonwealth Shoe & Leather Co., 72 Lincoln Street, Boston.
Corrugated Bar Co., Mutual Life Building, Buffalo, N. Y.
Cowdry, Henry E., Fitchburg, Mass.
Crane Co., 836 South Michigan Avenue, Chicago, Ill.
The Crosby Steam Gage & Valve Co., 40 Central Street, Boston.
Curry, William L., Curry Building, Pittsburg, Pa.
Dexter Yarn Co., Pawtucket, R. I.
Diamond Shoe Co., 196 Church Street, New York City.
Dillon, D. M., Steam Boiler Works, Fitchburg, Mass.
Disston, Henry & Sons, Inc., Tacony, Philadelphia, Pa.
The Dolge Felt Co., Oxford, Mass.
Eastern Manufacturing Co., Bangor, Me.
Economy Fuse & Mfg. Co., 328 West Kinzie Street, Chicago.
The Edison Electric Ill. Co., 39 Boylston Street, Boston.
Ehret Magnesia Manufacturing Co., Valley Forge, Pa.
Employers' Liability Assurance Corp., 33 Broad Street, Boston.
Fall River Electric Light Co., Fall River, Mass.
Farrington Manufacturing Co., Jamaica Plain, Mass.
The Ferro Concrete Construction Co., Cincinnati, Ohio.
Firestone Tire & Rubber Co., Akron, Ohio.
Fisk Rubber Co., Chicopee Falls, Mass.
The Forbes Lithograph Manufacturing Co., Chelsea, Mass.
Fort Pitt Steel Casting Co., McKeesport, Pa.
Fox River Paper Co., Appleton, Wis.
French Oil Mill Machinery Co., Piqua, Ohio.
General Electric Co., Schenectady, N. Y.
The General Tire & Rubber Co., Akron, Ohio.
The Goodyear Tire & Rubber Co., Akron, Ohio.
Granite Mills, Fall River, Mass.
Greenfield Tap and Die Corp., Greenfield, Mass.
Haskell & Barker Car Co., Inc., 507 Railway Exchange Building,
Chicago, Ill.
Hewitt Rubber Co., Buffalo, N. Y.
The Housing Company, 248 Boylston Street, Boston, Mass.
Huyck, F. C., & Sons, Albany, N. Y.
International Eng. Works, Inc., Framingham, Mass.
International Harvester Co., Chicago, Ill.
International Harvester Co., Chicago, Ill.
International Process Co., Indianapolis, Ind.
The Jarecki Manufacturing Co., Erie, Pa.

Kalmus Comstock & Westcott, Inc., 110 Brookline Avenue, Boston.
Keith, George E., Co., Campello, Mass.
Kimberly-Clark Co., Neenah, Wis.
Klipstein, E. C. & Sons Co., Greenwich Street, New York City.
Lackawanna Steel Co., Lackawanna, N. Y.
Lewis Manufacturing Co., Walpole, Mass.
Liquid Carbonic Co., Chicago, Ill.
Little, Arthur D., Inc., 30 Charles River Rd., Cambridge.
Lockwood, Greene & Co., 60 Federal Street, Boston, Mass.
Los Angeles Soap Co., 633 E. First Street, Los Angeles, Cal.
Ludlow Manufacturing Asso., 111 Devonshire Street, Boston.
Lumen Bearing Co., Buffalo, N. Y.
Lunkenheimer Co., Cincinnati, Ohio.
Macallen Co., Macallen and Foundry Streets, Boston, Mass.
McElwain, W. H. Co., 354 Congress Street, Boston, Mass.
McQuestion, George Co., 27 Kilby Street, Boston, Mass.
Manhasset Manufacturing Co., Providence, R. I.
Manufacturers' Machine Co., North Andover, Mass.
Massachusetts Breweries Co., 36 Hawley Street, Boston, Mass.
Massachusetts Gas Cos., 111 Devonshire Street, Boston, Mass.
Massasoit Mfg. Co., Fall River, Mass.
G. H. Mead Co., City Nat. Bank Bldg., Dayton, Ohio.
Merriam, M. H. & Co., Lexington, Mass.
Merrimac Chemical Co., 148 State St., Boston, Mass.
Metz, H. A. and Co., Inc., 128 Oliver Street, Boston, Mass.
Miami Copper Co., 61 Broadway, New York City.
Middlesex Bleach Dye and Print Works, Somerville, Mass.
The Millville Manufacturing Co., Millville, N. J.
Miniature Incandescent Lamp Corp., 95 Eighth Avenue, Newark.
Morden Frog and Crossing Works, 1873 Continental and Commercial Bank Bldg., Chicago, Ill.
Multibestos Co., Walpole, Mass.
Munroe Felt and Paper Co., 79 Summer Street, Boston, Mass.
Nashua Manufacturing Co., 82 Devonshire Street, Boston, Mass.
National Equipment Co., Springfield, Mass.
National Machine and Tool Co., 253 A Street, South Boston, Mass.
Naumkeag Steam Cotton Co., Salem, Mass.
New England Confectionery Co., 253 Summer Street, Boston, Mass.
New York Shipbuilding Corp., Camden, N. J.
Niagara Falls Power Co., Niagara Falls, N. Y.
Niagara, Lockport and Ontario Power Co., Marine Bank Building, Buffalo, N. Y.
Nicholson File Co., Providence, R. I.
The Otis Steel Co., Cleveland, Ohio.
Parkhill Manufacturing Co., Fitchburg, Mass.
Parks-Cramer Co., 1102 Old South Building, Boston, Mass.
Patchogue-Plymouth Mills Corp., 1115 Broadway, New York.
Perry Iron Co., care of Pickands Mather & Co., Cleveland, Ohio.
Pettibone Mulliken Co., 725 Marquette Building, Chicago, Ill.
Pfizer, Charles, & Co., Inc., 11 Bartlett Street, New York City.
Pierce Arrow Motor Car Co., 1695 Elmwood Avenue, Buffalo, N. Y.

The Plymouth Rubber Co., Canton, Mass.
Reading Rubber Manufacturing Co., Reading, Mass.
Replogle Steel Co., 120 Broadway, New York City.
Rhode Island Tool Co., Providence, R. I.
Roessler & Hasslacher Chemical Co., Perth Amboy, N. J.
Saco-Lowell Shops, 77 Franklin Street, Boston, Mass.
Samson Cordage Works, 88 Broad Street, Boston, Mass.
Sanford Mills, Reading, Mass.
Sayles Finishing Plants, Saylesville, R. I.
Sears, Thomas E., Inc., 10 High Street, Boston, Mass.
Simplex Wire and Cable Co., 201 Devonshire Street, Boston, Mass.
Smith & Dove Manufacturing Co., Andover, Mass.
The Snead & Co. Iron Works, Jersey City, N. J.
The Southern Cotton Oil Co., 120 Broadway, New York City.
Stafford Mills, Fall River, Mass.
Stevens, M. T. and Sons Co., No. Andover, Mass.
Stillwater Worsted Mills, Harrisville, R. I.
Stone & Webster, 147 Milk Street, Boston, Mass.
Stone & Webster (subsidiaries), 147 Milk Street, Boston, Mass.
Sullivan Machinery Co., Chicago, Ill.
Sun Company, 1428 South Penn Square, Philadelphia, Pa.
Sun Shipbuilding Co., Chester, Pa.
Textile World Journal, 144 Congresss Street, Boston, Mass.
Thilmany Pulp & Paper Co., Kaukauna, Wis.
Tide Water Oil Co., 11 Broadway, New York City.
Timken-Detroit Axle Co., 136 Clark Avenue, Detroit, Mich.
Todd Shipyards Corp., Care of Robbins Dry Dock and Repair Co.,
Erie Basin, Brooklyn, N. Y.
Toledo Furnace Co., Care of Pickands Mather & Co., Cleveland, Ohio.
Tropical Fruit Juice Co., 730 No. Franklin Street, Chicago, Ill.
Trout, H. G., Co., 226 Ohio Street, Buffalo, N. Y.
The Tube Winding Co., Cambridge, Mass.
Tufts, Nathaniel Meter Works, 455 Commercial Street, Boston.
Underwriters Bureau of New England, 141 Milk Street, Boston.
Union Carbide & Carbon Corp., 42d Street Bldg., New York City.
Union Paste Co., 293 Congress St., Boston, Mass.
United Drug Co., Greenleaf and Leon Streets, Boston, Mass.
United Furnace Co., Care of Pickands Mather & Co., Cleveland, Ohio.
United Shoe Machinery Co., 205 Lincoln Street, Boston, Mass.
U. S. Color and Chemical Co., Inc., 93 Broad Street, Boston, Mass.
U. S. Rubber Co., 1790 Broadway, New York City.
U. S. Smelting, Refining and Mining Co., Boston, Mass.
The Utah Copper Co., 25 Broad Street, New York City.
The Viscose Co., Marcus Hook, Pa.
Wanskuck Co., Providence, R. I.
Warren Soap Manufacturing Co., 77 Summer Street, Boston, Mass.
Washington Iron Works, Seattle, Wash.
W. Virginia Pulp and Paper Co., 200 Fifth Avenue, New York City.
Western Union Telegraph Co., 175 Congress Street, Boston, Mass.
Westinghouse Electric and Mfg. Co., New York City.
Whiting Foundry Equipment Co., Harvey, Ill.

Whitman, William Co., Inc., 78 Chauncy Street, Boston, Mass.

Williamette Steel & Iron Co., Portland, Oregon.

Winship, Boit & Co., Wakefield, Mass.

Worthington Pump and Mach. Corp., 115 Broadway, New York City.

Wright Manufacturing Co., Lawrence, Mass.

The Youngstown Sheet and Tube Co., Youngstown, Ohio.

IMPORTANCE OF THE PLAN

As Dr. Maclaurin said in his speech at the Alumni dinner, the Technology Plan is the most important step Technology has taken since its first and greatest step of being founded. It is an attempt, the first of its kind, to do for American industry what the Imperial German government long ago did for German industry, the close survey and direction of both education and industry towards co-operation for a common end, a procedure which did much to account for Germany's overwhelming success in certain branches of industry and commerce before the war.

The American Government has done virtually nothing to this end; Technology can expect no further help from the State of Massachusetts, and this plan provides that Technology shall initiate what was in Germany a function of the government, and shall furnish to industry that organized assistance it lacks at present, at the same time drawing from industry those financial sinews for which otherwise it must depend upon private generosity.

The Institute of Technology is unique. It is the only institution that carries on every kind of engineering education, that attempts to fit a student for any branch of engineering and any aspect of that branch he may choose, and to do this maintains a staff larger and more differentiated and an equipment more modern and complete than any institution of its kind, in the new world at least and, possibly, at present, in the old. And this tremendous, costly, highly complex and versatile organization is working at present on a schedule of only forty hours a week and eight months of the year full activity. With the money to provide a larger instructing staff, to secure larger numbers of scholars eminent in their special fields, to build more buildings, and to keep its equipment constantly on a level with the most modern industrial practice, there is no reason why the Institute should not keep open at full blast for twelve months in the year and for eight hours a day. If the need for the moment is increased production at any cost, and if industry is dependent primarily on men for that production, it is obvious that the source of these men, the technical school, can no longer keep to the schedule of a past generation. The Technology Plan will help to solve the puzzle of a hundred per cent efficiency for the Institute.

LIAISON

The comparison has been drawn between the Plan and the idea which founded the Stone & Webster Engineering Corporation. Before that day there had been engineering organizations and banking and development organizations, but none which could do the work of both, employ itself, so to speak, organize, finance, construct and operate — all from the same central office.

The Technology Plan will perform the same office for industry and

education that Stone & Webster performed for the banking and engineering world. It will bridge the gap between science and industry. It will be the fluid vehicle for the industrial life of America. It will need no other intermediary between idea and result. It will itself be the intermediary.

Industry in America, as compared to that in Germany before the war, is still haphazard, still unorganized, competitive in the bad sense. It does not, often, know where to go for help; it does not know the procedure; it can't guess, sometimes, how to make the start at solving its problems, it can't tell where to put its finger on the right man to solve them. It does not know how to start, to begin, to commence. Technology through its director of the Division of Industrial Co-operation and Research, through its staff, its great library, its perfect laboratories, can give Industry "the dope," can tell Industry if its hunches are right, can point out the way and set its feet on the path.

EDUCATION

On the educational side, the Technology Plan will meet the demand for trained men at the fountain head, and show its trend. It can show the Corporation and the Faculty how well the school is meeting the demand, what needs enlargement, what needs articulation and division, what needs to be scrapped as out of date. It can teach how the school can in its curriculum trim its sails to the immediate demand in industry, and it can foresee coming demands, demands as yet theoretical and extreme, and make ready to meet them when they come.

The Technology Plan will not obstruct or interfere with the present educational necessities of the school. Education will not be sidetracked for commercial research. Co-operation will supplement education. Professors in closer touch with the demands of American industry will teach better, because more vitally, than ever; the teaching staffs will be larger and more alive, less academic; and the students will have a chance as they advance in their course to do real work, to tackle real instead of academic problems and to do their thesis work to meet immediate questions in research.

The list of corporations making contracts with the Institute will be the Who's Who of American industry. There are still seats on the band-wagon.

THE NEW CHIEF OF INDUSTRIAL CO-OPERATION AND RESEARCH

Dr. William Hultz Walker appointed

THE new division of industrial service at Technology has just been placed under the direction of Dr. William H. Walker, for over twelve years head of the Research Laboratory of Applied Chemistry, and for over twenty-five years on the staff of the Institute. In choosing Dr. Walker as the head of this new department known as the Division of Industrial Co-operation and Research there has been elected a man who has done much to develop the high reputation that the Institute now holds in the industrial world.

The selection of Dr. Walker is a logical choice for it was he who during the present war, as a Colonel in the Chemical Warfare Service, successfully commanded the Edgewood Arsenal in Maryland. He received the Distinguished Service Medal with a citation for his technical ability, industry and zeal as a reward for the splendid work he did there at the Arsenal. He overcame labor disputes, directed over fifteen thousand men, obtained materials, completed and put in operation the largest toxic plant in existence, its output being nearly twice that of the other Allies combined.

Major E. Alexander Powell, in his recent book entitled: "The Army Behind the Army," speaks as follows on Dr. Walker's activities:

"The manner in which this college professor brought order out of chaos at Edgewood and its related plants, directed the activities of seven thousand soldiers, eight thousand civilian workmen, settled labor troubles, obtained material, completed and put into operation the largest toxic-gas plant in existence, and by his insistence in manufacturing at Edgewood all types of gasses including a large proportion of basic chlorine, made the government independent of manufacturers and contractors, was one of the most remarkable accomplishments of the war."

Dr. Walker has been on the Institute staff for over twenty-five years, being at the head of the Research Laboratory of Applied Chemistry for the past twelve years. The success of this laboratory has caused comment over the entire United States, its facilities being used extensively by such concerns as the General Electric Company, The National Tube Company, The Vacuum Oil Company and the Goodyear Tire & Rubber Company.

Concerning this appointment and the whole subject of the new division, the *Boston Evening Transcript* said editorially:

TECH'S "INDUSTRIAL SERVICE"

In company with an announcement of the choice of so strongly able a man as Dr. William H. Walker to be the directing executive of the

new division for industrial service established by the Massachusetts Institute of Technology, it is good to know that all the terms and conditions governing the work which the division will do have been as wisely devised and determined. When the plan to create this division was first described, with its proposal to make certain of the Institute's services available to industrial corporations in return for the payment of an agreed retaining fee, there was a disposition expressed by some observers in Boston to view the idea slightly askance. In these editorial columns, for instance, the possibility that the plan might throw upon the Institute an undesirable weight of obligation toward the clients retaining it was made a subject of analytical comment. The conclusion reached here, however, was to this effect: That whereas the danger might be inevitable in the case of educational institutions of a general nature, the services which Technology could fairly render were so specific and practical that they needed only to be clearly defined, in a legal contract drawn between the parties, in order to place the whole transaction upon a plane above reproach. What can now be most welcomely received, therefore, is the assurance that the contracts offered by the Institute accomplish this object with every certainty.

President Maclaurin, after showing by means of a specimen contract how explicitly the commitments accepted by Technology are defined in the written agreement, declares in a memorandum which he has supplied to us.

The Technology plan, far from compromising the Institute by making it subservient to a group of corporations, actually frees it from all suspicion of obligation and leaves it free to devote all of its efforts to "the realm of high and uncompromised usefulness which the school rightly embraces." Under the operation of the Technology plan the Institute may accept contributions from the great corporations, not as the object of charity or philanthropy, but as an engineering institution, giving value for payments received. . . . If the offer be accepted, the entire affair is placed on a business basis at the outset and all possibility of the company's exerting influence of any kind, by reason of the Institute being under some sort of obligation for the funds received, is eliminated.

In one very real sense of the word it is important to say that Technology's present plan is only a continuation of a service which it has long performed for industries seeking its advice and assistance in the past, but a continuation with a proviso which now simply determines how that service shall be paid for. Of the need and value of the aid so given by Technology there has never been any question, even though no concrete plan for financing and administering it was in existence. With the practical issues resolved, and every corporation given frankly to understand what services it may ask and not be denied, surely there should be expected an excellent further increase of the Institute's contribution to the technical progress of industry and so to the progress of the whole country.

THE ALUMNI DINNER

Most successful in the history of our annual dinners — enthusiasm and numbers — Mr. Smith's identity revealed.

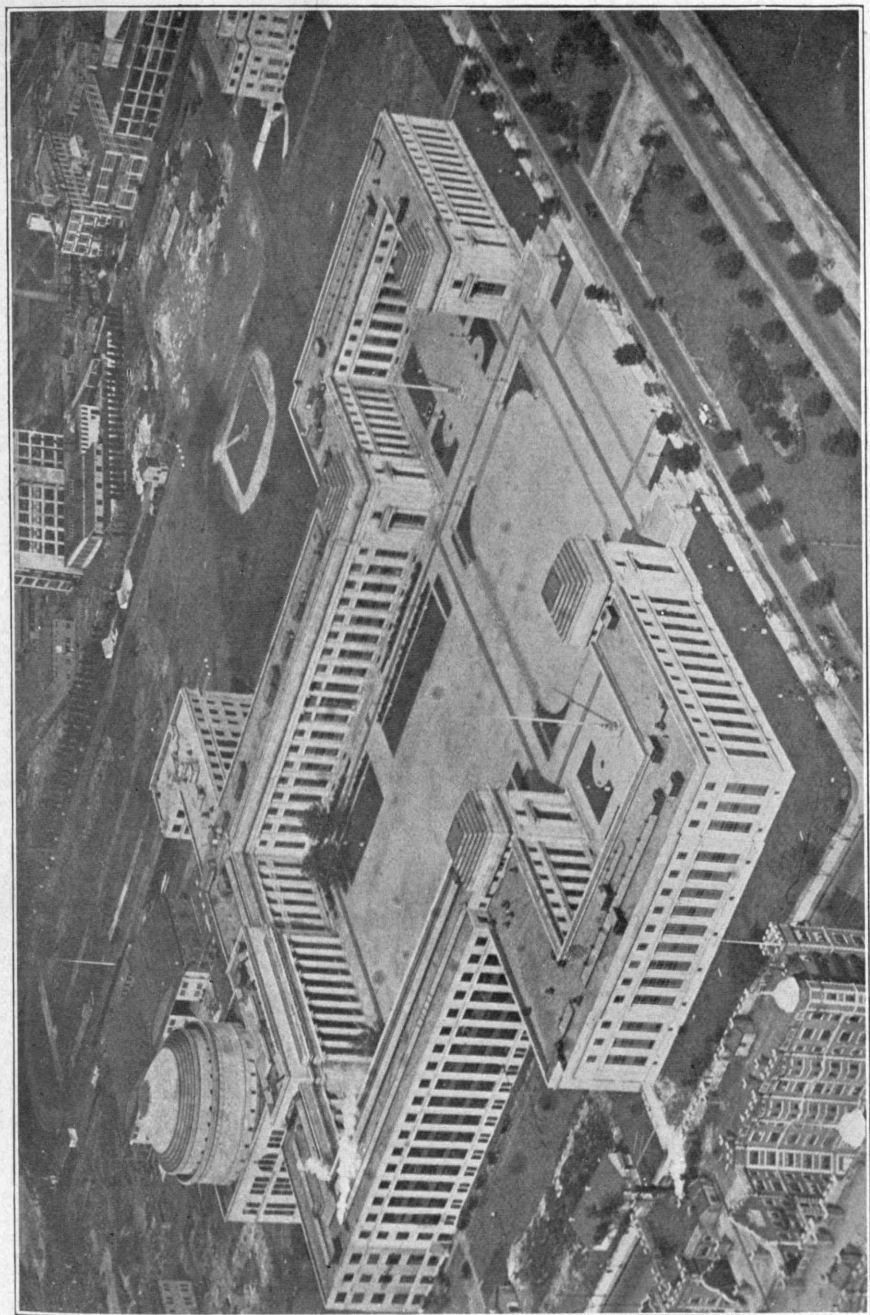
SADDENED somewhat by the absence of Dr. Maclaurin due to illness, but happily not dreaming of the tragedy of his death the following week, the annual Alumni dinner on the evening of Saturday, January tenth, to celebrate the success of the eight million endowment campaign, was the largest, most enthusiastic and acknowledged the most successful in the history of the association — with the exception, of course, of the monster telephone dinner at the Dedication Jubilee of 1916.

Under the banners of the classes the great floor of the Walker Memorial was crowded with tables, and the thousand diners overflowed into the long side galleries where the younger classes made the welkin ring. The usual band played the usual songs at Tech dinners and under the supervision of Dennie '11, with a megaphone, the classes tried to outyell each other for their favorite songs as of old.

The long head table was filled with men prominent in the life of Technology, Coleman Du Pont, president of the Alumni Association, the officers of the Association, representatives of the Faculty and the invited guests, Frank A. Vanderlip of New York, and a member of the Corporation, and Dr. John Wesley Hill, chancellor of the Abraham Lincoln Memorial University, the acknowledged success as orator of the evening with his now famous oration against Bolshevism.

The climax of the evening was of course the announcement, carefully held to the last moment, of the Mysterious Mr. Smith, George Eastman of Rochester. Owing to Dr. Maclaurin's illness his prepared speech was read by Professor William T. Sedgewick, senior member of the Faculty. The last paragraph, the crucial one of the announcement, was missing, and after announcing that Mrs. Maclaurin had declined the honor of giving Mr. Eastman's name to the world, General Du Pont as head of the Association announced it himself. The hall was darkened amid tremendous cheering, and the picture of Mr. Eastman was thrown on the screen to the accompaniment of "He's a jolly good fellow" by the entire company.

The speech of Dr. Maclaurin, his last message to Technology men, will be found printed separately in another part of this issue. But the whole dinner was a recognition of the president's ten years' work and accomplishment, almost as if the speakers had some intimation that it might be the last time on which they might do him such honor. General Du Pont, especially, as well as Francis R. Hart, '89, and Henry A. Morss, '93, told several personal stories of their relations with Dr. Maclaurin on the Corporation and revealed the intimate human side of the president as it was shown to his close associates. It was undeniably a Maclaurin dinner, as the excitement of the announcement of Mr. Eastman's identity had long been discounted by a very prevalent belief that



he was Mr. Smith, and the evening was noticeably marked by the general wish to make Dr. and Mrs. Maclaurin feel how greatly he was loved and how genuinely his work was appreciated at a time when it had borne such splendid fruit.

There follow some of the characteristic details of the evening as seen by the reporter of *The Tech*, which won an undeniable newspaper scoop by putting on sale, the moment Mr. Eastman's identity had been declared, a complete advance story of the successful results of the Endowment Fund Campaign and the revealing of the Mystery. The plans for giving out the story had been carefully laid, so that no other newspaper was able to print the news authoritatively until Sunday morning.

From *The Tech*:

The big banquet started at 7 o'clock with a mess call by buglers at various parts of the building. At the close of the dinner there were songs and cheers, led by Orville B. Denison '11, a member of the executive committee of the Alumni Association. Next a series of lantern slides was projected on the screen, giving the Fund total as \$8,024,180.41, also showing the progress of the campaign graphically and presenting the pictures of all the prominent 'Mr. Smith' suspects for the approval of the assemblage.

The entire program was one of carefully graduated suspense, leading up to the final disclosure. References to 'Mr. Smith' and his generosity to the Institute were too numerous to mention, each one evoking applause and cheers.

An eighteen-inch fire gong, the biggest procurable in the vicinity, was sounded by General du Pont, the chairman of the evening, at the beginning of the speeches. 'Dupy' praised Dr. Maclaurin's successful achievements, and made several announcements, among them the presentation of the new portrait, by Joseph de Camp of the late Professor Runkle, President of the Institute from 1870 to 1878, who died in 1902. He then introduced "the man who has done the most in the present campaign," Merton L. Emerson, '04, Alumni Director of the Endowment Drive.

Mr. Emerson thanked all the workers in the campaign, and announced that the \$4,000,000 mark necessary to fill all of "Mr. Smith's" conditions had been reached at five minutes of five Friday afternoon. He also said that the grand total was \$8,052,681. This was the signal for one of the greatest demonstrations of the evening.

Dr. William H. Walker, head of the new Division of Industrial Co-operation and Research, briefly explained the inception of the so-called "Technology Plan," the retainers for which now total \$1,103,000. He quoted William Rogers to show that the Institute was at last fulfilling the dreams of its founder.

In comparing the latest campaign with previous ones, Edwin S. Webster, '88, pointed out that it required two and a half years to get \$500,000 in 1912, while the present drive had amassed \$4,000,000 to match "Mr. Smith's" equal amount, in seventy days. He praised the "Technology Plan," and said, "Dr. Walker is the most eminently fitted man in the country to fill its directorship."

Following his partner, Charles T. Stone, '98, said that the greatest

credit was due President Maclaurin, since he discovered Mr. Smith. Mr Stone told how in 1912, Dr. Maclaurin had gone to New York in search of funds and three days later had returned, reporting a donation of \$2,500,000 given by a man who wished to be known only as "Mr. Smith."

Everett Morss, '85, of the Alumni Executive Committee, praised the Alumni for their hearty response and co-operation, but credited Dr. Maclaurin with carrying the burden of the entire campaign. The President, he said, had secured a million and a quarter by giving up his summer vacation after the announcement of 'Mr. Smith's' \$4,000,000 donation last September.

Speaking for the Faculty, Dr. Henry P. Talbot, '85, head of the department of Chemistry, expressed the hearty appreciation of every Faculty member. 'It spells opportunity,' he said in speaking of the Fund, 'also lessened anxiety and greater scholarly productivity.'

Frank A. Vanderlip, a member of the Corporation of the Institute, characterized the campaign as "an accomplishment which had to be made." Mr. Vanderlip suggested that the "Technology Plan" consider problems of relations with labor as well as problems of research and co-operation, and regarding the Fund he said, "It is ability which makes a country, and in these times of fantastic rewards for labor, the greatest reward is due those in the profession of teaching."

When Isaac W. Litchfield, '85, was asked to explain how he raised all the money, he responded by giving the entire credit for the campaign to "Mert" Emerson, who, he suggested, should be known as the man who put the "toot" in Institute! "Ike," said the new "Plan" was formed just at the right time, and predicted it to be a big factor in the future, with international significance. He closed his speech with the hope that "Mr. Smith" take good care of himself!"

The principal address of the evening, outside of that of Dr. Maclaurin, was made by Dr. John Wesley Hill, Chancellor of the Abraham Lincoln Memorial University.

Dr. Hill, in his address, declared that it is too late for "us, as Americans, to retreat from the battle which has now begun." This conflict, he characterized, as one "between loyalty and disloyalty, between 100-per-cent Americanism and the yellow-backed cowardly attempt to undermine it."

Referring to "Mr. Smith," Dr. Hill said he believed the donor was not a rich man, but a "man rich." "The former," he said, "is possessed by his possessions, while the latter possesses his possessions; the first is controlled by what he has, the second controls what he has; one is characteristic, the other character; one the cause of social unrest, the other its cure."

"You must go forward at Tech," declared Dr. Hill, "and widen the boundaries of your influence. You must settle the great industrial question of the hour by increasing industrial production and by letting it be known that you cannot do this and at the same time increase the wages of those men who do not and will not measure up to the necessities of the hour.

"We want real progress; we want to avoid the extremes of reaction and of revolution. Socialism is at present joy riding in the dark.

Bolshevism, like a wicked red man, is directing a Red propaganda from ocean to ocean and is dreaming of a Socialistic dynasty which shall be set up on the ruins of our institutions. I believe that a little shooting might be mixed with it to good advantage. (Applause.)

"If this shipping is to proceed it is time to sift out the people of our country and to segregate from patriotic American citizens all who love the black flag more than they love Americanism, load them on a ship of stone, with sails of lead, the wrath of God for a gale, and Hell for the nearest port."

Dr. Hill's denunciation stirred his auditors to so high a pitch of emotion that it was impossible for minutes after the conclusion of his address, for General du Pont to proceed with the program. At the suggestion of the presiding officer, Mr. Denison led a "regular 'M. I. T.'" with three long 'Dr. Hill's' on the end.

The REVIEW prints also the speech of Merton L. Emerson, '04, director of the Endowment Fund Campaign as the official announcement that the committee had actually gone over the top with the four millions necessary to secure Mr. Eastman's promised four millions.

"Mr. President and Fellow Members of the Alumni Association.

"It occurs to me that there is a saying in New York that 'Nothing can fail which has the name of General du Pont connected with it,' and so from the start our committee has had that inspiration with us and has intended to break all records and to complete this campaign long before July first, the date originally set.

"The very gracious words of commendation which have been expressed by the chairmen are, of course, intended for all the committees and for the one thousand or more men throughout the United States who have actively and earnestly worked on this campaign. I wish, therefore, at this time to express to them for the committee and for all Technology, the thanks that are certainly due them.

"Some of the details of the campaign have already been given you on the lantern slides, but the following facts, I know, will be of interest to you:

"The Fund actually passed the eight million dollar mark at four fifty-five o'clock last evening. Let me say in this connection that not one cent of this Fund had been underwritten and not one dollar held back. We all had faith, however, that with the three million dollar mark passed on December 16, we could reach the final mark by this evening, January 10.

"The grand total of the Fund as of this moment, including 'Mr. Smith's' four million, is \$8,052,681, of which \$2,945,805 is from 8123 subscribers and \$1,103,375 from 160 contracts under the 'Technology Plan.'

"I think every one of us should stop to realize that these impressive results are due to just one condition and that is organized alumni.

"To the class and district organizations all credit is due. You will all agree that an active alumni, and perhaps there is nothing better than a campaign for funds to make it active, means a successful and progressive institution.

"The work of our committee has, I believe, been marked by two important events, both of which have had a great deal to do with the

success of raising this fund.) One event was the getting of 'Ike' Litchfield back into the Technology game and the other event, the introduction and development of the so-called 'Technology Plan.'

"I wish to express my own sincere thanks for the particularly able assistance that has been given the fund by Litchfield, Doctor Walker, now director of the new division of Industrial Co-operation and Research, Stubbs, Lobdell, Gibbs, Miss Thomson in the New York office, and Miss Shepard and the thirty or more young women who have handled the details of the campaign in the Cambridge office.

"And now I wish to say just a few words about the 'Technology Plan.' The ultimate results which will come from this means of contact between technical education and industry, the one helping the other, will I believe mean far more to Technology in both an educational and financial sense in the years to come than the raising of the eight million dollars can ever mean, particularly with a man like Doctor Walker to give this new division a proper start. I wish to prophesy, therefore, that in future years this campaign will be known, not so much as having raised eight million dollars, but as having been the campaign that gave birth to and developed the great 'Technology Plan.'"

A BRIEF SKETCH OF THE ENDOWMENT FUND CAMPAIGN

AT five o'clock on the afternoon of Friday, January 9, the Technology Educational Fund went over the top with the necessary four million dollars to match Mr. Eastman's four. By the next evening, at the alumni dinner Merton L. Emerson could say that he had handled Mr. Eastman's subscription—and the thing was done.

This issue of the REVIEW has been twice delayed, once for the alumni dinner and again for the notices of the death of Dr. Maclaurin. We have adhered, however, to our original plan of postponing a full account of the Fund campaign until the April issue, in which will be printed the complete official report, with all possible details, sidelights, pictures, graphs, etc. It seemed best, however, to make a brief record in this issue of the main facts of the campaign. We reprint therefore the sketch of the drive, furnished by one of the executives in the drive to THE TECH for its alumni dinner issue.

HISTORY OF THE 70-DAY CAMPAIGN

Plans were formed for the raising of the Endowment Fund to meet "Mr. Smith's" conditions early last spring. The active work began with the appointment of a Corporation Committee headed by General du Pont '84, during the summer. An Alumni Committee headed by Merton L. Emerson '04 was appointed on October 17.

The Corporation Committee consisted of General du Pont '84, as chairman; Charles L. Hayden '90, as vice-president; Charles A. Stone '88, as treasurer; and Theodore N. Vail, Everett Morss '85, President Maclaurin, Otto H. Kahn, Edmund Hayes '73 and Merton L. Emerson '04.

Mr. Emerson, besides being on the Corporation Committee, was chairman of the Alumni Committee, the other members of the committee being Arthur R. Stubbs '14, Edwin S. Webster '88, I. W. Litchfield '85, Professor W. H. Walker, William H. King '94, Frederick K. Copeland '76 and Bradley Dewey '09.

Mr. Emerson has long been active in alumni affairs since graduating from the Institute in the course in civil engineering with the Class of 1904, and now has the honor of being the youngest man ever elected to the Corporation. He was on the executive committee of the last reunion, on the executive committee for war activities and is a charter member of the Alumni Council. In business life he is general manager of the Housing Company, of Boston, vice-president of the American Pneumatic Service Company, and director in various other companies throughout the United States. During the war he was a Major in the Chemical Warfare Service, in the Gas Defense Division. His residence is in Braintree and he is a member of the Engineers' Club of Boston, the Engineers' Club of New York, the Business Men's League of St. Louis, the Chicago Association of Commerce, the Boston Chamber of Com-

merce, the Rotary Club and the Wollaston Golf Clubs. In his undergraduate days besides being stage manager and general manager of Tech Show, he was a member of the Institute Committee, temporary president of the freshman class, a member of Osiris, class day committee, class orator.

General offices of the Fund were opened in the Institute directly opposite Dr. Maclaurin's office and a working organization was immediately set up there under the direction of H. E. Lobdell '17, general manager of *The Tech*, vol. 36. The office embodied a force totalling some thirty people and included a mailing and accounting organization as well as the general stenographic and clerical force. The "Give" side of the campaign was conducted from the office by I. W. Litchfield '85 and the "Get" side of the campaign was under the direction of Professor W. H. Walker.

On Monday, October 15, Dr. Maclaurin, General du Pont and Mr. Emerson spoke before a meeting at the Technology Club in New York and officially opened the New York drive, which was headed by William H. King '94. George Gibbs '00, formerly director of the Technology Bureau in Paris, was made director of the New York end of the campaign and established his headquarters at the Technology Club. It was due to his perseverance and energy in a large measure that the New York district showed up as well as it did. Dr. Maclaurin and General du Pont left on a two weeks' trip immediately after this meeting, visiting the alumni centers in Cleveland, Chicago, Milwaukee, Minneapolis, Kansas City, St. Louis, Indianapolis, Cincinnati, Detroit and Buffalo.

Previous to this trip Arthur R. Stubbs '14 had covered the ground during August and September while he was acting as assistant to Dr. Maclaurin, and his work served as a foundation to pave the way for the trip made by Dr. Maclaurin and General du Pont.

The first organization of the classes was at a dinner of the class secretaries held on the night of Thursday, October 23, at the Engineers' Club, Boston. Mr. Emerson laid the proposition before the secretaries and they assured him of their hearty support and promised to immediately organize class committees and to get in touch with their members, agreeing either to act as chairman of their class committee themselves or to get some one else to fill the office. This dinner was followed by another dinner a week later in which the class chairmen and secretaries were present; and weekly Thursday night dinners, which were spoken of as "taking account of stock" meetings, were held either at the Engineers' or University Clubs in Boston. Up-to-the-minute reports were posted on the black-boards and ways and means were discussed of reaching and laying the situation before the members of the classes, who had not subscribed at the time. The class chairmen formed the backbone of the organization.

On October 30 a general meeting of all the class committees, consisting of about six men in each case, was held in the Walker Memorial. Dr. Maclaurin was present and told of his trip through the Middle West, speaking particularly of the warm receptions that he and General du Pont had had. Mr. Litchfield and others addressed the meeting, telling of the organization of the Alumni Committee. A report of progress was asked from the different classes and results were posted on the

black-board so that all present could tell just what had been done and what was left undone. The meeting started off with a subscription which was personally given to Mr. Emerson by Professor Robert H. Richards '68.

Another general meeting of all the class committees was held on the night of November 24, at which the chairman asked to estimate the total number of subscribers and amounts that could be obtained from the various classes by January 1. B. S. Hinckley '99 talked on the plans for the New England "Get" campaign and E. S. Mansfield '96 gave a report of progress on the "Get" campaign throughout suburban Boston. Lawrence Allen '07 reported for the work of his Boston committee.

At this meeting the "Technology Plan" of contract with industrial organizations was discussed and laid before the alumni present by Dr. William H. Walker, who has since been announced as the new director of the Division of Industrial Co-operation and Research.

These estimates made at this meeting were used as a planning basis until, on the night of December 15 at a dinner at the Engineers' Club, of the class chairmen, it was found that many of the classes had exceeded their estimates and so a revision was made materially increasing the amounts in some cases. Following this meeting, Mr. Stubbs left for the Middle West, making his headquarters in Chicago and traveling around through the different alumni centers in the Central West, helping and encouraging the different local regional committees. The results of his trip showed an appreciable increase in the amount of interest taken and particularly in the number of contracts secured under the "Technology Plan."

The general work of the Alumni Committee consisted of circularizing and trying to lay before the alumni body the problem and need of the Institute. Continued emphasis was placed upon the fact that it was vital that Technology meet "Mr. Smith's" conditions and that the number of alumni subscribers should approach as near 100% by New Year's. The estimates made at this meeting are given in the detailed statement on another page of this issue.

Shortly before December 16, the fund passed the three-million-dollar mark and thus "Mr. Smith's" first condition — that three million dollars be secured before January 1, 1920 — was met. Although "Mr. Smith" allowed until July 1, next, to secure the remaining million, the committee went to work after the three-million-dollar mark was passed and decided to complete the raising of the entire amount by tonight so that at the dinner it could be announced that "Mr. Smith's" conditions were met to the letter. The four-million mark was passed Friday, January 9.

The summation of the work can be given in the one statement, "The Committee had the work to do and they went ahead and did it, finishing the job over five months ahead of time."

STUDENT DRIVE

Activities and undergraduates co-operate in campaign

At a mass meeting held in Walker Memorial gymnasium on the 10th of last November, President Maclaurin and Messrs. Merton L. Emerson '04, Everett Morss '85 and I. W. Litchfield '85, spoke to the undergraduates and the official undergraduate drive opened.

The committee of undergraduates which was formed to handle the student side of the drive was composed of Norris G. Abbott, Jr., '20, Chairman, 1920; John C. Nash '20, John J. Hines '20, 1921; Edward W. Booth '21, Francis B. Kittredge '21, Organizations; Herbert O. Davidson '20, Publicity; Carlton H. Talcott '21, Regional Chairman; Creighton B. Stanwood '20, Suburban Towns; George F. Gokey '20, 1922; Warren T. Ferguson '22, Holand R. Smith '22, Abbott L. Johnson '22, 1923; Robert E. Dodd '23, Allan Brantingham '23.

Red buttons were adopted as an identification for an undergraduate subscriber and five thermometers were placed in the main lobby to daily indicate the progress of the undergraduate fund. Considerable enthusiasm was aroused by means of competition. The different classes and the different societies and clubs practically went over 100 per cent in the matter of subscriptions.

At its smoker on the night of November 29, Tech Show pledged \$400 to the fund and this was followed shortly after by a subscription of \$500 on the part of *The Tech*, whose members gave an additional \$6,000 in personal subscriptions, making the paper 100 per cent subscribed. The first Technology organization to announce that its members were 100 per cent subscribed was the Chinese Club which numbers forty-three members, each of these men subscribing \$50 or more, totaling \$2,860 from the club. On December 2 the Aero Club held a smoker in Walker Memorial, and went "over the top." Every man present, before the close of the evening, had subscribed to the fund and a total of \$4,067 and seventy-three new subscribers were realized.

At the meeting of the class committee chairman of the alumni, held in Walker Memorial on November 24, it was estimated by N. G. Abbott, Jr. '20, that 2,000 undergraduate subscriptions could be secured for a total of \$56,000. This amount was reached before December, and the 2,000 subscribers were secured shortly after that.

The interest shown and the active and hearty co-operation of the undergraduates has been a constant cause for appreciative remarks on the part of the Alumni Committee. The final totals of the undergraduates, which are given on the following page of this issue, speak for themselves.

Student Drive

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<i>Class</i>	<i>Men in Class</i>	<i>Men Subscribing</i>	<i>Amounts</i>	<i>Percentage Subscribed</i>	<i>Average Subscription</i>
1920	403	341	\$23,519.00	84.5	\$69.00
1921	748	553	32,068.25	74.0	58.00
1922	1044	775	36,824.08	74.2	47.40
1923	688	583	24,736.00	89.8	42.40
Graduate Students	61		(Distributed over the four classes)		
Unclassified		11	1,099.75		
Total	2844	2263	\$118,247.08	79.5	\$52.20
Undergraduates Subscribing under an Alumni Class	129				
Grand total	3073				

AN INTERVIEW WITH GEORGE EASTMAN

Reprinted from the *Boston Post*.

By HERBERT F. BALDWIN

ROCHESTER, N. Y., January 12.— "Because I had to."

Such was the explanation which George Eastman, Massachusetts Institute of Technology's "mysterious Mr. Smith," made smilingly this afternoon when a *Post* reporter asked him why he had disclosed himself.

Compliance with law forced the telling of the secret that three women and two men had successfully kept from thousands of graduates and undergraduates of the famous technical college for nearly eight years. Mr. Eastman explained after he had consented to tell Tech's sons, through the *Post*, why he gave their alma mater eleven millions of dollars, and why, up to his latest gift of four millions, he had done it anonymously. Not only did the kodak king break his long silence as to his gifts to Tech, but this afternoon he shattered more personal precedents by suspending his rule of years' standing and gave for publication in the *Post* an interview embracing some of his views on the industrial and commercial future of the country.

George Eastman never studied at Tech nor any other college. He never even graduated from the grammar school. His mother had to deny herself in order to even keep her son in school until he was 14 years of age. When actual inability to further support herself and son sent the boy to work at the age of 14, George Eastman became an office boy. When he received his first week's pay he had the princely sum of \$4 — not another nickel in the world.

In the 51 years that have ensued since then no one has ever given George Eastman a penny. Today he is a multimillionaire, the head of the Eastman Kodak Company, a corporation with more than 16,000 satisfied employees. Most of his employees are stockholders with him in his company. He gave them voluntarily \$6,000,000 worth of stock in it. In charities, in gifts to institutions, colleges, civic improvements and other philanthropic dispensations, George Eastman has given away more than \$27,000,000, and he has earned every penny of it. Nor has his rise been "a la Wallingford." It's been a grind, and a hard one, met with many setbacks and disappointments and disheartenments. But always has George Eastman worked every working day of the week.

Such is "Mr. Smith," the man whom Technology's sons have wondered about, and so long as Technology may exist will be counted as one of them. But unless he again casts his desires aside and is interviewed for the third time in all his life, today's "second exposure," as he told the *Post* man he considered it, will have to suffice as his "glad-to-meet-you" to his brothers of Tech.

He wouldn't, despite pleadings and almost threatenings of such men as President Richard Maclaurin of Technology; Du Pont, the powder

king; New York bankers and a legion of others, attend Technology's jubilee dinner last Saturday and hear himself lauded. "Why, I don't think anybody should have expected me to," he said this afternoon. "It would have been vain and foolish." If it hadn't been illegal for him to make his latest gift to Technology without public record, "Mr. Smith" would still be a mystery.

Asked to talk about himself, George Eastman is about as loquacious as a Cape Cod oyster; but his friends, his employees, any one in Rochester, will talk about him. Fact is, they brag about him. And, it actually displeases this man of millions. He does not, and hundreds of would-be interviewers have learned the genuineness of Mr. Eastman's assertion in the past half century, like personal publicity. Business man that he is, he knows the value of publicity in his business, and all his publicity has been directed towards his cameras and his business.

Just what he thinks of his personal gifts is perhaps best embodied in a speech that he made some years ago, one of the few — very, very few — times that he has ever consented to talk in public. Even then it was extemporaneous. A friend told it to the *Post* man today. Mr. Eastman was attending a dinner where funds were being raised for a charitable work. Despite his declination to be a speaker, the toastmaster called upon him.

The friend who related the incident to the *Post* man had a clipping of the speech, verbatim. It read:

"The rich man doesn't really give anything. He only distributes part of his surplus. How much wisdom and good judgment be exercises in seeing how this is used is, I suppose, all for which he deserves any credit. It is the person of moderate means, the poor man, who really gives."

College men are the hope of the country, Mr. Eastman declared to the *Post* man. And he made clear that to his views on practical business and the development of industry and commerce, the Massachusetts Institute of Technology is "the" type of college. "No man," he said, "could go through Technology and not learn before he came out what his obligations are to his country. Technology stands for what the successful man of commerce and industry of the future must be."

Mr. Eastman received the reporter in his private offices on the 16th floor of the hive of industry which is the Eastman Kodak Company's office building. All during the interview he appeared, as his office executives agreed that he always is when confronted with personal publicity, more nervous than a schoolboy making his first declamation. He played nervously with the cord of a window curtain and gazed outside at the swirling flakes of a blizzard that was whitening the city.

George Eastman is 65 years of age, but he doesn't look his age. Born at Waterville, Oneida county, New York, on July 12, 1854, he lived there until he was six years of age, when his parents, Mr. and Mrs. George W. Eastman, came to this city to live. The elder Eastman established the Eastman Commercial College here, a famous institution in its day, and George Eastman's father was among the first of those who taught the principles of actual experience mingled with learning.

His father died the year that he came to Rochester and left Mrs. Eastman without funds with the six-year-old boy. By dint of hard work and self-denial Mrs. Eastman kept George in school until he was 14, when

he became an office boy for Cornelius Waydell, a Rochester insurance agent. Two years at that work and he went to the offices of Buell & Brewster, afterward Buell & Hayden, insurance agents. In 1874 he became a bookkeeper, having studied at home evenings, in the Rochester Savings Bank, and it was while he was employed there that he, in his leisure hours, made the first experiments and inventions of the camera development that made him famous and later the head of the big corporation in whose executive offices he sat this afternoon.

Mr. Eastman's eyes are dark, clear and cool. They beam at times behind his gold-bowed spectacles. Ruddy of face, the white hair shows beneath a black silken skull cap that covers spots where the hair has departed. He is rather short in stature, of medium build, and does not look like a man who could give away \$27,000,000 and still be a multi-millionaire. He lives quietly, alone in the big house on East avenue, just outside the city proper, a mansion where he and his mother resided before she passed away.

"I'm glad to meet you," he greeted the *Post* man as he shook hands with a grip that belied his three-score and five years of age. "I'd much rather not talk about myself, but — go on, I'll try and answer your questions." Absolute silence after the *Post* man had asked the first one, and then, after nearly a minute, Mr. Eastman said suddenly:

"I'll tell you. I selected Technology because of the facts that Technology had two of the elements necessary for a great educational institution. First, its faculty, and second, the body of students. It lacked only the third great need of a successful educational institution, the money. The same money might have been spent, perhaps, to start another school here, somewhere, but such a school would lack those other two necessary elements — faculty and proper students. Even with money a new school might never have been able to supply them as Technology was and is.

"The reason my name was kept a secret was because I desired it. I wanted to escape the personal notoriety of being fussed over by giving in large amounts."

The millionaire's eyes twinkled and he smiled a sort of half-grin as he answered the reporter's next question. "I'm disclosed," he said, "because I had to be — not because I wanted to be. This last gift involved the transfer to Technology of 5000 shares of common stock in the Eastman Kodak Company, and, of course, it had to be made public for legal reasons. If it were not for that my name would still be unknown, so far as Technology was concerned, except to Dr. Maclaurin and my secretary." President Maclaurin's secretary and his wife were said to be the other two women who knew the big secret, as was disclosed in the address read by Professor Sedgwick at Cambridge last Saturday night.

"Just why, Mr. Eastman," asked the reporter, "did you select Technology for these gifts?"

"Realization of what Technology is," the kodak king answered promptly. "For many years I had been coming in contact with men from Technology, many of them right in my employ here in this company. I'd been watching the progress of Technology for some time — I like to study things — and my special interest in Technology was due,

no doubt, to the fact that I was constantly coming in contact with the men who had come from there.

"I had been watching the treasurer's report from Tech, too, and so when I came to the conclusion that it was time to help Technology, I asked Mr. Lovejoy, a Tech man who is with this firm here, to arrange an interview with Dr. Maclaurin. This was done by correspondence. The rest of the story is nothing; I met Dr. Maclaurin and talked with him. I decided that I was going to help Technology and so I made the first gift. I asked that it be recorded as from 'Mr. Smith.' The name — from nowhere, just 'Smith.' That's all.

"Technology's future should be big. It has the faculty, it has the students, and with the endowment fund it has the money.

"No, I have no advice to give to Technology or to Technology's men, nor would I attempt to advise them as to what their aims should be to further develop themselves and the part they should play in the future of the country. I don't believe that it is possible for a man to go through Technology without having learned what his duty to his country is. Tech stands for what this country ought to be and Tech teaches how America and American industry and commerce should be furthered and benefited.

"College men, I believe, are destined to be more successful in the future than ever before. I think that the importance of education is growing all the time. In my day a man was not so much handicapped by competition as he is today. Every year sees thousands and thousands more of college men — highly trained men — and I believe that the importance of being educated as much as possible is growing, and that it has been tremendously increased in importance by the war.

"We all had the lesson of seeing the preferment which college men gained in the war, and so I believe that, aside from the benefits a man gets from a college education in enabling him to live a more rounded life, a college education is necessary because of the growing importance of enabling him to successfully compete with others."

Asked to give his views on industrial conditions of today, Mr. Eastman said that he had no fear of the coming of chaos. "I think," he asserted, "that industrial conditions are on their way to become better from now on. I have no fear of the coming of chaos. As for the unrest, I believe that the fear will amount to just what American citizens allow it to. In other words, it will depend on just what firmness we use at this present time.

"There are some things that may be temporized with, but the proposition to bring about a revolution by violence in this country is not one of them. Americans are first of all Americans."

ADDRESSES WANTED

The Alumni Association is preparing to publish again its directory of the alumni and former students of the Institute. It hopes to complete the book in time for the June All-Technology reunion. But hundreds of men are missing. We have no addresses for them. The work of the Technology War Record and of the Endowment Fund Committee has been greatly hampered by the fact that there are many former Tech men who have allowed themselves to be lost track of. It is unlikely that they will see this list. But some of their friends will. Please look through the list below—the list of missing men. Read it carefully. If you see the names of any men whose addresses you know, please inform the Alumni Association at once. This is absolutely essential if our new Alumni Directory, the first in five years, is to be complete and representative.

'68

Horatio B. Bearse
Charles W. Bowser
Walter F. Devereux
Samuel Eastwood
Shepard S. Everett
Arthur Gorham
Horatio S. Greenough
Charles A. Hecksher
William Hurd, Jr.
George H. Johnson
Charles Kreissman
William M. Ogden
John Peck, Jr.
Frank H. Perkins
James W. Poor
F. C. Sherman
George H. Thom
Walter H. Tuckerman
George F. Wetherbee

'69

Frank H. Allen
William H. Bartlett
Henry C. Bowers
Edwin P. Chapin
Arthur F. Ewell
Francis D. Fisher
Edward C. Harris
Frank S. Hillard
Edward P. Kennard
Andrew C. Peterson
Charles S. True
Isaac P. Wainwright
Theodore E. Wardwell

'70

Frederic Amory
Charles F. Archer
Joseph W. Byrnes

Charles G. Cassell
Arthur Chester
Harry J. Cobb
Benjamin L. Cushing
George L. Eastman
Thomas J. Gray
John C. Hadley
John C. Hardy
Edward T. Howe
Charles K. Jewett
David Loring
George B. Mifflin
Charles D. Motley
Hermann W. Newcomb
Frederic R. Page
Frank G. Parker
Arthur H. Pearson
David J. Piercy
Benjamin T. Prescott, Jr.
Edward Renouf
George H. Stevens
George F. P. Thayer
Robert M. Vosburgh
James G. Whitney
Harry S. Willard

'71

Nathaniel H. Bishop
John R. Carter
George A. Clark
James W. Clark, Jr.
Charles F. Danforth
Frederick T. Gay
Theodore T. B. Hunt
Walter L. Johnson
Frank E. Levanseler
Charles L. Littlefield
William U. Lothrop
Francis A. Newell
Charles M. Nicholson

John Nottage
George W. Page
Thomas P. Rich
Joseph D. Sawyer
Joseph R. Scott
George R. Shaw
James A. Shedd
Carlos J. Smaller
Edward N. Smith
Philip H. Smith
John S. Vose
Eli Whitney

'72

Joseph L. Anderson
Charles H. Bateman
Charles B. Beck
William B. Bigelow
Walter H. Browne
J. W. Buell
Frederic W. Coffin
Arthur M. Devereux
John A. Fowle, Jr.
James W. Haley
Clarence C. Hanford
Charles H. Hunt
William L. McLane
George A. McMaster
Nathan B. Putnam
Enrique E. Ruiz
Benjamin Silliman, Jr.
William H. Stearns
Charles L. Steele
Edgar Stewart
Edwin D. Thompson
Edward E. Townsend
Alfred B. Whitney
James P. Whitney
George D. Wyman

'73

Frank P. Abbott
 George F. Badger
 George M. Barker
 William H. Barnes
 C. D. Barrett
 Frederick A. Bicknell
 John L. Briggs
 Francis B. Chadwick
 Jonas Clark, Jr.
 Ralph D. Cleveland
 Arthur M. Crosby
 Horace L. Dunklee
 William L. F. Fox
 Charles W. Greenwood
 Charles E. Hill
 George W. W. Houghton
 Benjamin N. Howe
 George P. Hunt
 William R. Hutchings
 Samuel P. Jones
 Silas T. Lucas
 Alpheus E. Mead
 William Merrick
 William A. Minor
 William B. Page
 Henry S. Partridge
 Elliott W. Preston
 Thomas D. Quincy, Jr.
 Henry M. Scanlin
 Egbert T. Steele
 Deming J. Thayer
 Fuyouki Tominaga
 Edsie A. Wade

74

Nehemiah W. Adams
 Charles T. Bruce
 Alexander S. Dandridge, Jr.
 Edgar J. Dubbs
 G. Frederick Haynes
 Edgar S. Heaton
 Hewes Hunneman
 William R. Parmelee
 Richard B. Robinson
 J. Herbert Ropes
 Spencer E. Smith
 Thomas W. Smith
 William P. Snow
 George Woodruff
 Henry F. Worcester
 Edward B. Young

'75

George F. Belden
 Henry M. Bingham
 Frank S. Blanchard
 M. DeWitt Burnet
 Charles H. Cochran
 Armand Guys
 John B. Hamblly
 Alfred J. Jaqueth
 James Austin Knapp
 Almon C. Libby

Louis A. Mitchell
 Kingman S. Nichols
 Louis W. Peck
 Edward G. Reynolds
 Francis T. Sargent
 R. T. Sargent
 Norris W. Smith
 William C. Stevens

'76

Aaron D. Blodgett
 Edward F. Burleson
 William W. Carney
 E. Frederick Carr
 Charles E. Churchill
 Edgar C. Curtis
 William F. Cushing
 Frederick S. Eaton
 William Frederick Ellis
 Clifford A. Farwell
 Newman W. Gardner
 J. Howard Hatch
 J. Lyman Hayward
 Charles A. Hicks
 Delazon P. Higgins
 E. H. Ketchem
 William S. Larned
 Henry L. Leach, Jr.
 John O. Lord
 William Messervy
 John Mitchell
 William H. Morrell
 James E. Nasmith
 George W. Neal
 Charles H. Patch
 Robert E. Pierce
 Jonathan W. Pratt
 Orlin M. Sanford
 Arthur Steele
 William F. Towne
 Sieken Tsuchiya
 James D. Tyler
 Edwin E. Waite
 George West
 George A. Wilde
 Joseph M. Wilson

'77

David H. Austin
 Edward F. C. Berton
 Frederick W. Brown
 William Burton
 Thomas Byers
 Arthur B. Coburn
 John B. Correa
 George A. Freeman
 Robert D. Geer
 A. J. Goodman
 Nathaniel Hill
 Frank T. Hopkins
 Frank P. Knott
 Chandler Macomber
 Frederick R. Newbold
 William Morgan Peters

Edward E. Piper
 Frank Reed
 John Riley
 William Rowland
 Lyman W. Smith
 Francis W. Temple
 Charles R. Tuck
 Henry Tudor
 George F. Underwood

'78

Francis L. Allen
 Raymond D. Chappell
 William Fairfield
 Charles H. Newell
 Joseph K. Nye
 Charles Paul
 George W. Purdy
 Sylvian M. Ramsdell
 Edgar M. Robison
 Edgar F. Webster

'79

Charles R. Carrett
 J. Clifton Cutting
 George F. Davenport
 Edward D. Eldredge
 Willard W. French
 Carl E. Gerhardt
 William Goding
 F. W. Grimes
 Salem M. Hardy
 John B. Johonnot
 George P. Kendrick
 Miss Cynthia G. Melvin
 Charles H. G. Minchew
 James E. Moore
 Gonzalo M. Moregon
 Edward A. Page
 George L. Plimpton
 Charles R. Pratt
 James W. Ring
 Elmer E. Ruggles
 Winthrop O. Sargent
 William S. Schmitt
 William A. Sessions
 James J. Sheridan
 Louis Agassiz Sourel
 Arthur H. Stephenson
 Frank A. Storer
 Harry H. Swinburne
 Samuel H. Taft
 James Knox Taylor
 John Van Hovenberg
 Charles A. Washburn
 George E. Whitney

'80

Frederick B. Abbot
 William F. Almy
 Moses Pennock Barnard
 Oscar E. Brandt
 Augustus P. Brigham

William G. Bronson
 David J. Cartwright
 Charles P. Chandler
 George H. Chapman, Jr.
 William H. Chappell
 Herman Clarke
 John A. Cunningham
 Ephraim Cutler
 Louis L. Drew
 Albert D. Evans
 Frank D. Fowler
 George T. Francis
 William D. Hartshorne
 Frederick A. Hoyt
 Robert T. Jackson
 Sewall J. Kendall
 Mrs. Harry V. Long
 Walter P. Marble
 George T. Matthews
 George S. Miller
 Henry A. Miller
 Charles L. Morse
 Charles S. Parker
 Blitz W. Paxton
 Charles W. Riddell
 Arthur W. Sanborn
 T. L. Smith
 Mrs. John Tetlow
 Joseph Torrey
 Jared A. Vining
 John W. Wells
 H. L. Wentworth
 Arthur W. West
 Frank W. Wiley

'81

Elmer M. Bent
 Mrs. Bouve
 Frank N. Brown
 Charles W. Buck
 Miss Burge
 William P. Burgess
 Arthur N. Clark
 William M. Dougal
 Miss Katherine S. Fletcher
 Miss Laura L. Giddings
 Charles F. Hopkins
 Miss Belle H. Joslin
 Fred P. Kendall
 Frank Mansfield
 George M. Moore
 Charles J. O'Brien
 Fernando Perez
 Richard Pester
 Arthur Philbrick
 Harry M. Pope
 James A. Proctor
 Edward I. Robinson
 Charles P. Simmons
 Andrew H. Symonds
 Lalia C. Tedford
 Harold Van Duzee

'82

Mrs. Russell Allen
 Miss Susan P. Atkinson
 Clarence A. Backer
 James E. Cavanagh
 Mrs. S. P. Clark
 Walter Curtis
 Ervin Emmons
 Samuel T. Fisher
 Arthur H. Foster
 George E. Fowle
 Mark Frothingham
 Robert W. Gilbert
 Alfred K. Glover
 Edward W. Haines
 A. Jarvis Hastings
 Archibald Johnson
 Fred B. Judkins
 Mrs. Richard H. Kennedy
 John F. Low
 Mrs. Lowell Moore
 W. H. Nicholson
 Hugh K. Norman
 Charles W. Nutting
 Henry E. Snow
 Parry K. Solger
 Horace W. Stinson
 Thomas Tryon
 Miss Sarah E. Wentworth
 Holman K. Wheeler
 Frank M. Youmans

'83

William H. Baldwin
 Miss Hattie A. Ballou
 Benjamin A. Bean
 John J. Carr
 Edward A. Chapel
 Marcus L. Child
 George A. Coburn
 Walter M. Codding
 Joseph L. Collins
 George S. Converse, Jr.
 Harry H. Drew
 Charles L. Flint, Jr.
 Robert Tilden Gibbons
 Amos H. Graves
 Frank P. Hall
 Frank B. Hart
 Carlos S. Heshon
 John W. Hinkley
 J. Frank Hobart
 John R. Howard
 Albert H. Huckins
 Walter C. Hunting
 Frederick N. Kemp
 Yung C. Kwong
 Miss Florence Lake
 Joseph Leitelt
 John G. Litch
 Hamilton F. Low
 Edmund Mackintosh
 Dunbar Marshall

H. Rogers Mason
 William M. Morrison
 Miss Mary Palmer
 Charles E. Rich
 Henry Savage
 James Sirret
 Charles A. Snedeker
 Rufus C. Stanley
 Julien W. Vose
 J. A. Wardwell
 Charles D. Wentworth
 Herbert H. Wild
 Harry F. Woods

'84

William Bement
 Miss Mary A. Blancher
 Cushing M. Bryant
 Dr. O. C. Burgess
 Emma O. Conro
 Herbert H. Crosby
 William C. Curtis
 Charles C. Dodge
 Charles C. Downes
 Harry Draper
 Miss Julia M. Dutton
 Harry O. Edwards
 James H. Edwards
 Edward Everett
 Mrs. Charles S. Foss
 Frank J. French
 William Gilmore
 Fred E. Gore
 James Grant
 David P. Guest
 C. Humphreys Guild
 George E. Guthrie
 James W. Hale
 Edward J. Hassett
 Rutherford P. Hayes
 Celeste W. Herrick
 Joseph E. Holmes
 Charles F. Holdship
 Edward Jewett
 George H. Lilley
 James R. Lovett
 Horace B. Martin
 William R. Maxwell
 Lillian M. Munger
 Miss Kate M. Murphy
 Elijah B. Nichols
 Charles W. Parkhurst
 J. H. Penny
 Arthur B. Phillips
 Samuel P. Poland
 Walter B. Price
 George W. Reynolds
 George L. Richards
 Edward B. Riley
 Charles H. Rose
 Forrest F. Russell
 Wallace B. Smith
 Charles E. Spalding

W. Albert Swasey
Andrew Thompson
Se Chung Tyng

'85

Paul W. Abbott
Harry W. Ayer
Francis H. Boynton
Henry Brooks
George A. Brown
Daniel A. Campbell
Austin C. Childs
William C. Davis
James T. Dorsey
Charles A. Drake
Charles B. Emerson
Albert W. Frost
Henry G. Frost
William D. Fuller
Arthur H. Gaudelet
Harry E. Gustin
Fred A. Hall
Charles A. Heath
Charles Herpich
Harry Huntington
William H. Jackson
Fred J. Johnson
Charles R. Jordan
Edward F. S. Leach
Will L. Littlefield
Calvin W. McFerran
Jono F. Marques
Mary W. Mathewson
Robert B. Moore
William R. Morgan
Ferrando Neumann
Effie M. Parker
William H. Parker
Frank Parsons
Edward Penrose, Jr.
Helen S. Perry
John F. Quinn
Frederick A. Raht
Manuel E. Recuero
Frederick B. Rice
Charles S. Robinson
William B. Sears
Harold S. Shepardson
Miss Lizzie A. Taylor
Andrew Thompson, Jr.
Herbert Tower
Harold Ward
Richard C. Weis
Herbert M. Weston
Henry A. Wilcox
Miss Mary Williams
Ernest Winne
Herbert W. Winning
Edwin D. Wolfe
Frank S. Yeaton

'86

Frank M. Ames
Charles T. Atherton

Samuel W. Atkinson
George W. Aulmann
Francis C. Baker
Charles F. Beindorff
Frank E. Beular
Joseph S. Boss
Charles L. Burlingham
Harry G. Bush
Edward R. Cassidy
William B. Cheney
Ada M. Chevalier
Robert S. DeCoster
James C. Duff
Frederick W. Eaton
George H. Eaton
William F. Edwards
Julian O. Ellinger
Warren H. Ellis, Jr.
Miss Mary A. H. Fuller
Miss Sarah P. Gunnison
William T. Haarstick
Julius C. Hainer
Dennis T. Harbaugh
John W. Herrick
Frank C. Hoyt
Frank A. Hutchinson
Frank P. Ingalls
Richard A. Leigh
Fred M. McGraw
Frederic Mason
Harry B. Merriam
Mrs. Harriot R. Milinowski
Edward W. Mitchell
William M. Morgan
Fred R. S. Ormsby
James Otis
E. Frederick Owen
Arthur H. Page
Louis L. Parke
Miss Florence Peltier
Charles B. Peters
Miss Lucy J. Pike
Edward G. Powers
Blake Reynolds
Louis B. Riley
John E. Ryan
Francis R. Safford
William E. Shepard
Pelham W. Shipman
Delavan Smith
Irwin Z. Smith
John P. Titcomb
Fred W. Tyler
William F. Van Buskirk
Frank S. Wilson

'87

W. R. Amesbury
Charles H. Atkinson
Miss Alma Aumack
Charles V. B. Baker
Charles A. Barton
George L. Billings
John L. Bixby, Jr.

Charles E. Bockus
Stephen W. Bowles, Jr.
Edward M. Bruce
Dr. T. Kitson Bruce
Percy Bryant
Lewis A. Burr
Henry M. Carter
Adelbert E. Clafin
William Crafts
Will R. Cummings
Jesse L. R. Eliot
H. Clayton Erwin
Guy H. Greeley
William S. Hadaway, Jr.
Russel B. Hinchman, Jr.
James B. Hovey
E. W. Keyser
J. Frederick Kilburn
Edward Lovering
Rudolph J. Meiser
Douglas G. Miller
James K. Moorhead
Herbert T. Murdock
Frank C. Nichols
A. R. Nickels
Carroll Potter
John W. Raymond, Jr.
James M. Smith, Jr.
Loun Snow, Jr.
George W. Sprague
Herbert B. Steele
George H. Stevens
William G. Thornbury
C. D. Underhill, M. D.
Horace Van Sands
Hugh E. Voorhies
William L. Wall
Oscar B. White
Henry E. Wilde
Harry C. Wood

'88

S. Fortun Y. Andre
Ernest H. Baldwin
John Blodgett
Morgan H. Bowen
David Brayton, Jr.
Edward C. Caughey
Edward W. Chickering
Ellery F. Coffin
Walter H. Cole
Louis L. Curtis
Arthur S. Davis
James L. Dean
James P. Duncan
William Edwards
George J. Elder
Joshua E. Forsyth
Walter N. Foss
Professor A. B. Frizell
John H. Freeman
John W. Hawes
Miss Anna C. Herrick
Edward R. Hix

Francis W. Hoadley
 Herbert M. Howes
 Herbert A. Hunting
 Frank G. Krucker
 Caroline C. Ladd
 Mrs. Carrie G. Leland
 Walter E. Lewis
 Theodore Lincoln
 Benjamin C. Lockett
 Arthur S. Mann
 Sumner Merrick
 Henry C. Moore
 Miss Mary H. Page
 Leon J. Partridge
 Edwin R. Pearson
 Charles H. Putnam
 William Proudfoot
 E. Walter Rathbun
 Joseph G. Rhoads
 Louis G. Schultz
 David Silverberg
 Darius B. Smith
 N. B. Smith
 Charles W. Stevens
 Frederick S. Taylor
 Frederic Tenney
 Robert C. Tenny
 Joseph A. Thorp
 Winburn J. Willingham
 Mrs. Jessie B. Winsor
 Harry S. Woodworth

'89

Hayden G. Bailey
 Henry H. Bailey
 Miss Annie F. Baldwin
 George C. T. Baldwin
 Martin S. Barnard
 Frederic E. Calkins
 J. C. Chadwick
 Fred M. Dewing
 Charles B. Folsom
 Charles W. Gilman
 Irving T. Guild
 William H. Grover
 Joseph J. Hall
 Prescott F. Hall
 Fred Ham
 Foster B. Hill
 Macauley Hunter
 Frank B. Jonas
 Willard P. Knapp
 Joseph M. Ledwith
 Louis L. Lincoln
 J. Woodward Manning
 Daniel A. Moore
 Charles H. Morse
 Frank A. Mower
 Samuel M. Newell
 Herman L. Noyes
 Charles E. Oliver
 Louis H. Olzendam
 S. Woodward Manning
 Herbert W. Paine

Harold P. Palmer
 Wisner I. Park
 Edwin H. Pattison
 Waldo L. Plimpton
 Herbert M. Pomeroy
 Henry A. Pulsford
 Albert E. Putman
 Julien B. Ruffin
 Edward F. Sherman
 George P. Simpson
 Frank W. Smith
 William A. Stedman, Jr.
 Rowland W. Stewart
 Lewis S. Thompson
 George M. Tilson
 Guido G. Von Wrede
 Thomas Walkup, Jr.
 Miss Gertrude L. Watson
 George A. Whitmore
 Robert C. Williams
 Theodore G. Williams
 Walter W. Williams
 Ernest V. Wright
 Julian V. Wright

'90

Arthur E. Chase
 Ernest C. Cougan
 Harry W. Curtis
 Bertram H. Davis
 George W. Dodd
 Walter J. Dore
 Francis W. Dunbar
 Gordon Eaton
 Charles R. Edgerton
 Frederick T. Fischer
 William P. Flint
 Gorham A. Gilman
 Alfred H. Granger
 Herbert W. Haddock
 John P. Heywood
 Prof. Frederick S. Hollis
 Gilbert Hubbard
 Francis F. Hussey
 Daniel D. Kearns
 George C. Landis
 William M. Lorenz
 George B. Loynes
 George B. McConnell
 Edward R. Maker
 William R. Marshall
 Charles E. Martin
 Mytton Maury
 Edwin J. Meyers
 Cabot J. Morse
 George C. Osborne
 George L. Parmelee
 William G. Plumer
 Miss Mabelle K. Remick
 Graham Robinson
 Francis C. P. Thomas
 Henry M. Waite
 Charles M. Watson
 William F. Wells

Nathan B. Wilbur
 William M. Wilcox
 William D. Willes
 Miss Mary P. Winsor
 Edward H. Wood
 William B. Wood
 George M. Woodward

'91

George P. Baldwin
 Rowland H. Barnes
 Joel Gray Barri
 Miss Frances C. Batcheller
 Eugene K. Bigelow
 Thomas M. Brooks
 Charles E. Burr
 William P. Castle
 John D. Clark
 John S. Cook
 Thomas H. Creden
 George P. Crohen
 Thomas H. Curtis
 George H. Cushman
 Charles A. Dillingham
 Charles K. Drake
 Miss Elizabeth R. Drowne
 Elbridge E. Duncan
 Louis Edmonds
 William T. Eustis, Jr.
 George W. Favor
 Mrs. Anne W. Forsythe
 Henry Fox
 William R. Greene, Jr.
 M. W. Greer
 William J. Henderson
 John A. Highlands
 Charles A. Johnson
 John M. Joy
 Charles F. Kahnweiler
 Julius W. Loewenthal
 Charles B. McCormick
 Donald McDonald
 Leo G. McKellops
 James H. Mansur
 Pryor L. Markel
 Lears S. Marshall
 Jesse T. Morey
 Ernest Nickerson
 Henry F. Noyes
 Charles M. Palmer
 Robert M. Pierce
 Sheridan Plaisted
 Charles Q. Rawling
 John F. Reynolds
 John L. Schwartz
 Prentice Shethar
 William Stickney
 Mrs. L. C. Stillings
 Junius Stone
 William T. Thayer
 Miss Harriet A. Todd
 Paul H. Tracy
 Samuel F. Tuckerman
 Charles H. Urban

Dudley S. Watson
Bryant Willard
Albert P. Woolley

'92

Walter E. Bates
Charles O. Bourne
William Braden
Charles A. Brigham
Harry P. Center
William Chaffee
Arthur F. Childs
Arthur Christian
Elijah B. Cleveland
George E. Dadmun
William H. Damren
Julian B. Downey
Robert C. Dye
Robert F. Elmer
Colonel Logan Feland
Clarence B. Floyd
Francis H. Foster
William W. Foster
Frederic B. Fuller
William E. Gallison
Charles J. Gillon
Edward F. Glover
Edward W. T. Gray
Charles S. Greene
Fred A. Gritzner
Wesley Halliburton
Edwin F. Haserick
James K. Hastings
David S. Hawkins
George B. Hawley
Francis J. Holland
Clyde W. Holliday
George Bridges Howe
Ralph R. Littlefield
Percy D. M. McLeod
Daniel J. McSweeney
Forrest C. Mann
David H. Marbury
Henry E. Mason
William V. Meade
Henry Meredith
George A. Merrill
William C. Meserve
Ralph H. Miller
Rudolph C. Mollman
Leonard J. Nilson
Charles N. Palmer
Harry Charles Parkes
Winfred C. Porter
John Scattergood
Norman P. Schiller
Charles M. Sears
Russell Selfridge
Arthur Rogers Spaulding
George B. Squires
John R. Stevenson
Philip A. Warner
Edward Payson Whitman

'93

Luther Anthony
Irving McFarland Barrows
George Basadre
Edward D. Breed
Frank H. Briggs
Glenn C. Brown
John R. Bullard, Jr.
A. M. Burt
George A. Caldwell
Arthur W. Clogher
Leon H. Cooper
Prof. Nathaniel R. Craighill
George A. Curry
Philip B. Day
Charles W. Draper
Edmund J. Fairfield
Harold E. Fales
Arthur Farwell
Mrs. Londa S. Fletcher
Herbert C. Foss
Clarence E. Fuller
Henry W. Gore, Jr.
Miss Carrie A. Granger
S. S. Haskell
William R. Hawkins
Charles F. Hayden
Philip L. Hirst
James D. Horton
Harry S. Hout
Josiah W. Howe
Henry R. Kimball
Gustav J. Meyer
James M. Nelson
Joseph Curtis Noblit
Edmund H. Noyes
George F. Osgood
Faustino Apolonio Perez
Louis L. Plack, Jr.
John Pleasants
Edward Lincoln Raymond
William K. Reed
George Waldo Sanborn
Edwin E. Schneider
Morris Louis Schwarz
John F. Schweitzer
Frederico R. Seyffert
Lampson Parker Sherman,
Jr.
Clarence W. Smith
Henry Smith
Robert R. Smith
Henry C. Stilwell
Cornelius M. Stoneman
Charles E. Thompson
Fred Lane Varney
Vincente B. Villa
Dr. Jas. S. Wadsworth
James W. G. Walker
Arthur P. Watson
Ludwig M. Weiller
Frank I. Whittemore
George F. Woolston

'94

Edward W. Abell
Francis M. Adams
William E. Annandale
Mrs. Caroline W. Barrett
Robert M. Bennett
James A. Binney
Charles E. Bowers
John H. Buttmer
Jesse C. Carlton
Nathan C. W. Chapman
Thomas I. Chapman
John C. Clarke
Charles H. Cutler
Nelson W. Dalton
Chester W. Dennis
Arthur J. Farnsworth
George W. Frank, Jr.
Clyde N. Friz
Charles E. Gilpin
Mrs. Walter B. Griffin
Robert S. Hale
Burt S. Harrison
Preston H. Haskell
Edward S. Hughes
William S. Hulse
Donald R. Jacob
Joseph Jensen
Herbert E. Johnson
William A. Johnson
John William Jones
Pelham W. Lincoln
Robert Loring
George S. McLaren
Charles W. McMurty
Miss Mary I. McNear
Frank F. Maxwell
Leonard Williams Minot
Frederic M. Noa
Heita Okada
Charles G. Osgood
William E. Parnall
William E. Patterson
Alexander R. Pike
Albert W. Randall
Gano Ray
A. M. Robeson
Thomas M. Sharpe
George E. Shulze
Maurice Sichel
Frank L. Smith
John Watson Tarbox
Arthur M. Tracy
Giles M. Turner
John Ross Wade
W. H. Weston
Mrs. George S. Whiteside
Harry Hayden Whitney
William L. Woollett

'95
Louis N. Allison
Louis P. Andres
Miss May Banta

Francis N. Bardwell
 Herbert E. Bishop
 Miss Mary Bradley
 Henry C. Burnham
 Robert M. Cannon
 Omar H. Carrier
 Litchfield Colton
 Harry W. Cotton
 William F. Craig
 Eugene B. Crockett
 Miss Gertrude P. Davis
 Stanton K. Davis
 Edward M. Dexter
 Mrs. George F. Dodd, Jr.
 Albert G. Eastman
 Francis T. Estes
 Robert D. Farquhar
 Fred L. Felton
 Harold G. Fitts
 Charles H. Foss
 Philip A. Fowler
 Elwood S. Gatch
 Ira B. Goodrich
 Mrs. Robert Greenwood
 Williston W. Greenwood
 Frank E. Hall
 John E. Hamlen
 Miss Annie L. Hanchett
 Karl S. Harbaugh
 James J. Hawley
 Peter E. Hellwege
 Mrs. Thomas Hibbard
 Paul F. Jacobson
 Charles H. Johnson
 Cyrus Fisher Johnson
 Frank W. Kendall
 Walter H. Kleinpell
 Charles E. Lockwood
 Andrew J. Logan
 Miss Helen W. McElwain
 James Madison
 William F. Mahoney
 Miss Mary C. Metcalf
 Dennis W. Murphy
 John F. Murphy
 Arthur B. Newman
 Harry Orville Parker
 William H. Parker
 Robert F. Pauli
 William B. Platt
 Frederick W. Potter
 Caio G. da S. Prado
 Plinio da S. Prado
 Frank J. Pratt, Jr.
 George W. Priest
 Lee M. Raney
 John A. Rathbone
 John A. Roche
 Adolph G. Roeth
 Mrs. Abbie M. Shankland
 Arthur B. Shepard
 William B. Smith
 Frank Snow
 August C. Stock

C. Chester Taft
 Ellis C. Thayer
 Frank A. Thornley
 John H. Thurber
 Ross True
 Hugh M. Tucker
 Arthur P. Vandenberg
 Luiz G. Whitaker
 Harold Boyden White
 Louis F. Whittier
 William H. Wills
 Andrew N. Winslow
 W. Connor Witherspoon
 Philip H. Withington
 Frederick C. Zitz

'96

William F. Allen
 Frederick W. Andrew
 William J. Batchelder
 George L. Blakeslee
 Herbert A. Bolan
 Edwin Allen Brown
 Leander Burnett
 Thomas A. Burnside
 Manuel H. Cadenas
 Miss Helen Cheever
 Mrs. F. S. Churchill
 Frank D. Clark
 William B. Clough
 Alfred D. Conant
 Walter H. Coristine
 William B. Corson
 Percy K. Crocker
 Miss Ida M. Curtis
 Miss Alice M. Cutter
 Carlos A. Diaz
 Miss Mary S. Ewing
 Robert J. Forsythe
 Floyd Frazier
 Charles L. Glass
 George H. Glass
 Edward P. Gould
 Charles H. Hall
 Harry G. Hamlet
 W. C. Haseltine
 Rudolf Hesse
 Walter Monroe Hollis
 Carlton R. Hunt
 Frank W. Jaques
 Graham Jones
 Frank A. Kendrick
 Charles A. King
 Edward Clarence Lang
 Armin Friedrich Lindenlaub
 Cecil Horace Low
 Amasa J. Lyall
 Edwin C. McClintock
 C. B. Maynadior
 Edwin Moorman
 James K. Morgan
 Arthur C. Nash
 Vance C. Osmont
 James M. Owen

Joseph E. Owens
 John Patrick
 Henry A. Pressey
 Ellis W. Prince
 Fred L. Robbins
 Miss Harriet L. Robinson
 Francis A. Rosengarten
 James C. Russell
 Eduardo E. Saldana
 E. L. Sanford
 Miss Sarah A. Shorey
 Albert C. Smith
 William D. Smith
 Joseph H. Smyth
 John L. Snyder
 Charles M. Stamp
 Lamont R. Stroud
 Edward G. Tarr
 William W. Thayer, Jr.
 Charles D. Trumbull
 John L. Wagner
 Frederick H. Walker
 Arthur L. Ware
 Alba H. Warren
 John Whitmore
 Benjamin C. Williams
 Roland H. Williams
 Alla F. Young

'97

Joseph W. Abbott
 Franklin Baker, Jr.
 Warren H. Barnes
 Alva M. Bass
 Maurice W. Bigelow
 George H. Bliss
 Michael J. Burns
 Nathan C. Burrill
 Walter M. Cabot
 Alexander G. Caldwell
 Seth A. Capron
 Charles Bevan Clark
 Dwight Clark
 Thornton D. Conness
 Arthur V. Curtis
 Charles T. Dalton
 Jose Y. Diaz
 Manuel D. Diaz
 Elizabeth G. Dowd
 George N. Faxon
 Edward H. Ferguson
 Fred D. Fitch
 Morris J. FitzGibbon
 Charles W. Frazier
 George A. Fuller
 James L. Fyfe
 William H. Gardiner
 Henry G. Greene
 Oliver C. Grinnell, Jr.
 Anthony Hankey, Jr.
 Fred C. Harlow
 Charles L. Hastings
 Harold W. Hathaway
 Benjamin F. Healey

Miss Ann Hibbard
 Mrs. Florence J. Higbee
 Edward L. Holmes
 Arthur C. Jennings
 Ernest C. Johnson
 Herbert S. Joslin
 Ernest B. Lamprey
 Earl E. Lawrence
 William G. Leary
 Alec W. Lee
 William L. Lee
 Miss Edith Luce
 John P. McMillan
 John J. McSorley
 Arthur H. Mann
 Benjamin F. Manning
 Gordon McKay Mellen
 Charles I. Merrick
 Miss Sarah E. Miller
 William W. Morrison
 Parnell S. Murray
 M. Francis Oliver
 Hugh Orr
 Miss Annie M. Parker
 William D. Parker
 Horace W. Parmenter
 Sidney H. Parsons
 William Edmund Pattison
 Miss Georgia Porter
 Bertram C. Ransome
 L. G. Robinson
 Warren A. Rooke
 Mrs. John W. Ross
 Herbert A. Severance
 Peter J. Smith, Jr.
 Arthur E. Snow
 Charles B. Stebbins
 Franklin Stetson
 Robert C. Terry
 William W. Travis
 Enoch R. Vedder
 Alfred A. Vignos
 Paul S. Ward
 Charles C. Warren
 George W. Warren
 Francis E. Whitcomb
 Richard Whitney
 Miss Bessie H. Williams
 Charles H. Wood
 Henry J. Woodberry
 E. Harold Woodworth
 William A. Wyatt
 Mrs. H. G. Ziliacus

'98

Rev. Donald N. Alexander
 John W. Ames
 Joseph W. Ames
 Charles R. Ballou
 Howard J. Benson
 George S. Berry, Jr.
 Miss Isabel Bevier
 William R. Bonnycastle

Miss Cecelia K. Bratt
 George H. Breed
 Mrs. Ernestine H. Briggs
 Harry E. Brown
 Thomas F. Carroll
 John F. Cashman
 Alfred H. Caspary
 Wendall W. Chase
 Miss Gertrude R. Clark
 Henry H. Clark
 Joseph C. Cook
 Miss Lucy C. Crehore
 Eugene T. Cudworth
 Harry A. Curtis
 Luiz Marinho de Azevedo
 Robert L. Denison
 Miss Katherine E. Dolbear
 Harry D. Donnell
 John W. Fleet
 Charles E. Fleming
 Emory H. Fogerty
 Albert I. Frye
 Miss Anna G. Furlong
 Ernest A. Gallison
 Robert C. Graham
 Ralph Harris
 George O. Haskell
 George W. Hill
 Albert W. Hitchcock
 John D. Horgan
 Miss Anna F. Hyde
 Miss Alice B. Ide
 George C. Innis
 Harry A. Irish
 Mrs. Josephine F. Johnson
 Isaiah T. Jones, Jr.
 Horace A. Kelley, Jr.
 James A. Keniston
 Frederick Kleinschmidt
 James O. Lacaillade
 Walter L. Lovejoy
 Walter G. McConnell
 James McCormick
 Harrington Mack
 Thomas McKie
 Joseph L. Mara
 Lee A. Miller
 James F. Muhlrig
 Charles A. Murphy
 Edward Oelrich
 Arthur L. Pilgrim
 Volney L. Poore
 Lamont Rich
 Mrs. Augusta F. B. Robinson
 Harry B. Sargeant
 Albert R. Shedd
 Capt. Charles J. Skinner
 Miss J. Angelina Smith
 James H. A. Smith
 William G. Smith
 Miss Jean H. Stowell

Frank S. Tucker
 Miss Susannah Usher
 Gentry Waldo
 Nathaniel C. Walpole
 Walter C. Watrous
 George H. Watson
 James E. Webster
 John F. Wessel
 Roscoe B. Whitten
 Edwin E. Wightman
 Miss Winifred Williams
 Miss Lillie M. Wilson

'99

Miss Bessie Owen Abbott
 Miss Marjorie C. Appleton
 Carlyle N. Barron
 Walter F. Brackett
 Miss Helen L. Burr
 James E. Childs
 Edward B. Coolidge, Jr.
 Charles W. Corbett
 Janaro Davila
 Charles H. Deering
 Winthrop R. Dodge
 John E. Downes
 George H. C. Ensworth
 Dwight Farnum
 Robert A. Ferguson
 John A. Flemings
 DuRelle Gage
 Gardner M. Gale
 Charles S. Gaskill
 Walter E. Gilman
 Rafael S. Gonzalez
 Charles R. Greenlaw
 Miss Helen M. Hanscom
 David H. Hayden
 R. Stewart Henderson
 Edward T. Hildreth
 Miss Helen E. Hobbs
 Gardiner G. Hubbard
 David J. Jenkins
 Hans Peter Jensen
 Harry G. Johnson
 Lane Johnson
 Elijah R. Jones
 Fred H. Lathrop
 Charles H. Layne
 Mrs. Josephine D. Lowe
 William T. McDonald
 Guy Magee, Jr.
 Eugene de Mitkiewicz
 Arthur R. Moody
 Jedediah A. Morrill
 Alejandro Nebel Herreros
 Edward T. Newkirk
 Raymond Noble
 Walter G. Nowell
 Timothy L. O'Brien
 Will R. Parker
 Edward D. Pettingell
 Constantine D. Phasoularides

Edward Stuart Baker
Joseph C. Baker
Lowthian Lambert Bell
Fritz C. Bickford
Melville Bryant Bowman
James Harris Broidrick
Charles Knowlton Hawkes

Bunting

Warren Ulysses Chase
Norman M. Chivers
Charles H. Clare
William Armstrong Clark
Nowell Hendrix Cobb
Charles R. Craig
David L. Davis
George H. Davis
Francisco Bento de
Alvarenga

Louis J. T. Decary
Edwin N. Dorr
John C. Eadie
Howard Hollister Flagg
Daniel Alfred Birchmans
Foley

Lynette Ford
Elbert Fowler
George W. Francis
Campos Andres Fuentes
Fernand Vaughan Gasquet
Louis W. Hammett
William Augustus Harris
Frank Albert Jameson
Thomas E. Jewett
Henry H. Kennedy
Earle Forrest Knowles
Eugene Lombard
Theodore Adolph Longue-
mare

William T. P. Mader
William C. Marsh
George Adams Marvin
Harold C. Mitchell
Miss Mary F. Moore
John Henderson Morse
James Albert Murphy
Samuel Bailey Newton
T. W. Osgood
Raymond F. Page
Edward De W. Perry
Roland Ambrose Perry
Percy H. Physeck
Ernest Cornelius Poin
Frederick P. Poole
Max Currier Richardson
Edwin Sprague Robinson
James Hampton Rogers
Milton L. Rubel
Henry Harding Russell
John Farrar Schofield
Robert Emmett Sherlock
Alberto William Small
Alfred Dennett Smith
Harold Clap Stetson
James H. Tebbets

Harry R. Vender Horst
Albert W. Walker
John Aloysius White
Clara Bowdoin Winthrop
Bartolette Artman Yoder

'06

Mrs. Mary R. Andrews
Harry J. Armstrong
Albert A. Blodgett
Robert H. Booth
Milton G. Brown
Avedis Melkon Chuchian
Samuel Saul Dargan
Miss Rebecca Dodd
Hugh D. Dunn
Reuben Einstein
Edith Gertrude Emery
Alphilda Caroline Field
Charles Eugene Fogg
Edward W. Forbes
William Henry Foster
John Clifford Frazee
Alfred W. Geist, Jr.
Jay T. Gilmer
David Gregg, Jr.
Ransom C. Grovenor
Frank F. Hasbrouck
Lawrence W. Hayes
Frederick Williams Hinds
Kathryn Mills Hinsdale
William Effingham Hogel
Richard L. Hogner
Charles Edward Howes
Charles McKay Hunting-
ton
Ralph H. Jackson
Henry Russell Johnson
William Chapin Ketcham
Philip R. Lamar
Henry Forrest Leland
Charles R. Littig
Frank Logan
Dr. Claude S. McGinnis
Herbert D. McKibben
William E. Montgomery
Clarence Garfield Morton
Miss Mary Moseley
Walter N. Munroe
Louis S. Murphy
Wallace Newberger
Henry Lane Oaks
Howard Leslie Ober
Julia A. Elizabeth Prichard
Mrs. Lucy C. Read
Roger L. Rice
Manuel Rivero
Walter B. Sanborn
Arthur G. Sherman
Waldo Irving Shuman
Walter Smith
Carl Colton Stevens
Robert Kilburn Stoddard
Killey E. Terry, Jr.

Louis A. Thompson
Viola J. Turner
Juan F. Urquidí
James G. Walker, Jr.
George A. Wall
Ernest A. Walter
Lawrence B. Webster
Knight Willmer Wheeler
Richard B. White
Bernard Foster Whittaker
John Timothy Wrinkle

'07

Miguel Ahumada, Jr.
David M. Bisset
Elmer R. Bitler
Mildred E. Blogett
Frederick E. Bonfield
Richard William Brownlee
William M. B. Burnyeat
Chester M. Butler
Robert Hill Cable
Jesse R. Clark
Julius Creidenberg
Herbert Winch Day
Albert H. Donnwald
Harold C. Eddy
Charles Reed Faben
James H. Fenner
Lt. Lloyd Ralston Freden-
hall
Frank W. Friend
Percy Wheaton Fuller
Fred William Gordon
Max A. Greenburg
Miss Florence M. Homer
George Euclid Houghton
Howard Morris Johnson
Robert D. Jones
Ralph G. Kanne
Jose Goncalves Lucas
Henry C. McRae
James John Mahler, Jr.
Howard Marvin
Walter S. Moore
Frank Hadley Muchmore
Charles Horace Nelson
Ludwig Sanger Nordstrum
Webb Harlan Otis
James B. Packard
Hugh G. Pastoriza
Hans Krieger Paulsen
John Prendergast
John Ralph Randall
William Allen Redding
Edwin C. Richardson
James Smith Rogers
Mortimer Louis Sampliner
Roberto Browne Sarratea
Miss Bina May Shorey
Ugo Sissa
John Skassirsky
Eugene Gregory Smith
Edwin R. Stilwell

Harold W. Streeter
G. Gifford Symes
Utarō Tsukakoshi
Fred P. Upton
Henry Philip Tappan Van
Keuren
Samuel R. T. Very
William J. Walker
John Price Wetherill, Jr.
Emil Wilkinson
John Hall Williamson
Maurice E. Wyner

'08

Eldridge I. Baker
Ralph E. Beck
Morgan Lamore Bodenstein
Miss Louise M. Bosworth
Augusto de Moura Brazil
Charles George Carson
Ting T. Chen
Sahak M. Chuchian
James H. Davidson
William P. Davidson
James H. Denny
Harold C. Faxon
Miss Susie Theodosia
Folsom
Leonard Stinson Gerould
Jose Gomez
John Brayton Harlow
Daniel F. Harriman
Robert Francis Haskell
Lafayette B. Hedge
Joseph K. Heydon
George G. Holman
Prince C. Hopkins
Harry Gifford Hume
Mrs. Louise B. Jay
Tsan Chi Lee
Yuen Foo Leong
William G. Logue
Ting-Yu Lo
Charles L. Lufkin
Earle Brann Lyons
Miss Gertrude L. Marvin
George C. Mason
Albert L. Messer
Francis J. Murray
George M. Nauss
Stanley Foushee Nelson
Uter James Nicholas
Henry J. Noble
Thomas W. Orr
William B. Parker
George W. Phillips
Robert Pike
Robert T. Pollock
Harold S. Pratt
Aristotle H. Prodomos
Joseph G. Reid
Max S. Rohde
Henry J. Ruggles
George W. Scott

John J. Sheehan
Joseph H. Sinclair
Rafael Sotomayor de Luna
Walter C. Spencer
Aram Torossian
George J. Venn
Ralph C. Walter

'09

William Oliver Ames
William H. Berg
Arthur Bridgman
Thomas F. Carroll, M. D.
William D. Clark
Herbert Cordwell Cloudman
Edward Joseph Colgan, Jr.
Frederic Reid Coolidge
Farnum
George Palmer Garrett
Newmann B. Gregory
Eugene Lucius Grunsky
Alfredo Harrison
Charles Hibbard
Roy Hunter
Frank Stephenson James
Carl Gustave Jerden
William Francis Jones
Charles Russell Keith
William J. Kelly
Arthur Harry Lange
John E. Lenox
Archie McEachern
Francisco Davila Marquez
Valerio Masjoan
Edmundo Correa Pacheco
Leonard W. Pritchett
Lewis Racoosin
Frank H. Remick
Harold M. Richards
Rudolph W. Riefkohl
Burton H. St. John
Frederick Salathe
Julius H. Serra
John William Shea
Herman T. Shen
Earl McColloch Smith
Plumer Henry Smith
Clark Dee Sniggs
Chester L. Standley
Louis Svarz
Gora Tomonaga
Miss Marie Celeste Turner
Mrs. Stanley M. Udale
James Newman Walls
Irvin Lewis Weis
Aber Stowe Wiester
Shotara Yagishita

'10

George Howard Allen
Angel G. Armendariz
John E. Barnard
Van Zandt Beall
Miss Jane Poultny Bigelow

Ralph H. Bowers
Frederick C. Butman
Charles D. Carey
Jay Wesley Carley
Enrique de Garay
William J. G. Dew
William Lester Enfield
George Orme Ferguson
Harrison W. Flickinger
Winfield Ulric Foster
H. Scott Gerity
Bedros Martyros Goomrigian
Herbert S. Gott
James Allen Grant
Achilles Hadju-Savva
Fred D. Hagar
Malcolm B. Hall
Earl R. Hamilton
W. Burton Hargraves
Ira Samuel Hartman
Frank A. Hayes
John Joseph Higgins
William Hileman
Ralph Hilscher
Harold Howe Hodgkinson
Grancis Brewster Hooker
Miss Frances Johnson
Hubbard
Tora Inouye
Jesse Evans James
Shegekitsu Komizo
Samuel Kostiuik
Leal Charles Lee
Raymond Lozoya
Manson A. Lyons
Ruluff D. McIntyre
John F. McNamee
T. Augusto Mazier
George E. Miers
John Miller
Mark Nickerson
James B. Noble
Romualdo Esteban Olagui-
bel
Bertholf M. Pettit
Ernest A. Redman
John William Revel
Lawrence G. Rice
Henry Schuman-Heink
Guy F. Shaffer
Clifford G. Sherman
Francis Seward Smith
Stewart S. Southgate
Walter T. Spalding
Martin Olmsted Sparrow
Hector Tabossi
Charles James Toner
Yuan Tze Tsai
Henry Charles Turner, Jr.
Charles E. Ware, Jr.
Theodore B. Whittemore
Roy A. L. Wholley
Hachiro Yamada
M. Alva Zook

'11

Eugene S. Anderson
 Sarah Randolph Anderson
 Herbert A. Angell
 Walter Arthur
 Marcus Sherman Beecher
 Samuel I. Blum
 William Raynor Cannon
 Miss Georgianna Charles-
 ton

Chuhsen Chow
 Alberico B. deAraujo
 Carlos De Landa
 Waldemar Ramon Diaz
 Carlos P. Echeverria
 Leroy G. Fitzherbert
 William E. Fortune
 Srabian Vartan Givrigian
 Jacob Goldberg
 Alton S. Hallett, Jr.
 James F. Johnson
 Fuljian A. Kaminski
 James J. Kennedy
 Thomas Larkin
 John D. McNamara
 Raj Kishore Misra
 Edward A. Nash
 Alanson L. Palmer, Jr.
 Sidney A. Patchett
 Armando Pauvolid
 Capt. Lester W. Perrin
 A. Washington Pezet
 Chapin S. Pratt
 Silas M. Ratzkoff
 James Calvin Rogers
 Frederick Manuel Saqui
 Samuel M. Schmidt
 Lewis Schwartz
 William A. Shepard
 Carlos Alberto Valverde
 Clarence A. Woodruff

'12

John W. Baker
 Frederick Arthur Bennett
 Sylvan Birnbaum
 Walter O. Blaisdell
 Norman L. Bowen
 Alfred Charles Brown
 Robert B. Brownlee
 Arthur D. Buzby
 Herbert H. Calvin
 Robert A. Chandler
 Roy Everett Coram
 Newton Davis
 Fred L. Franks
 Juan Garza
 Joseph Edwin Harrington
 Roscoe Dean Hart
 Percy Chandler Henry
 Hans Christian Holm
 Raymond Jarrett
 Irwin S. Joseph
 Lieut. William H. Jouett

Lieut. Francis H. Kingsbury
 Archibald W. Laurie
 Hans Frank Lehmann
 Carl Lindemann, Jr.
 Corliss Blake McClelland
 Gregory Bernard McFaul
 Dennis F. Mahoney
 John S. Martin
 Ralph Peter Melendy
 Lester G. Metcalf
 Charles August Meyer
 David Montt-Garcia
 Frank Lewis Moore
 Emil Oeffinger
 Ricardo Lara Pacheco
 Joseph H. Quinn
 Ross H. Rathbun
 Jacob Saslaw
 Seth H. Seelye
 Alfred N. Smith
 Solomon Steinberg
 Clarence A. Stewart
 Wladimer Wanjukoff
 Francis D. Welsh
 Nicholas W. D. Worthington

'13

Robert A. Allton
 Herbert B. Alvord
 Murtha Paul Daniel Bassett
 Franklin A. Bent
 William Allen Bottomley
 A. Laurance Brown
 Edward H. Cameron
 William S. Crost
 Miguel de la Torre
 Charles D. Duffy
 Thomas A. Dutcher
 Frederick J. Evans
 Lieut. Heisler Harrington
 Ellis W. Hartford
 Manuel A. Hernandez
 Charles Thomson Herndon
 Leo S. Hubbard
 Harry Kaitz
 Alberto E. Lavenas
 Hugh P. LeClair
 Charles L. Levermore
 D. Ellwood Lewis
 Earle R. Lincoln
 Norman H. Lynch
 Thomas F. McNeill
 Axel Olsson
 Capt. Alfred G. Ranney
 Boris Rapoport
 Richmond Rochester, Jr.
 Paul Ruttkay
 Philip Schmitt, Jr.
 Francis Ernest Severance
 Peter N. Shagury
 Louis A. Swatzburg
 John B. Welch
 Ronald M. Wilson
 Leonard A. Wood

Charles M. Woodcock
 Harry S. Wright

'14

Abraham Barnett
 Roswell M. Boutwell
 Ralph D. Brown
 Augusto D. Caballero
 Richard M. Cantwell
 Shao Ching Chen
 Yu Mai Chu
 Cedric E. Coram
 Edgar Howard Davis, Jr.
 Chauncey E. Doud
 George W. Duncan
 William Alonzo Etherton
 Wilson Gording Fleming
 Lucius H. Graham
 Paul A. Heroult
 Ralph H. Jones
 Clifford R. MacKenzie
 Harry G. Matthews
 Robert G. Mead
 Michael T. Ortin
 Christian M. Pederson
 George W. Pickering
 Peter Risga
 Leo Salomon
 Carl A. Sandburg
 Frank L. Sawyer
 Sidney V. Smith, Jr.
 Rossyn Smythe-Martin
 Herman Sprude
 Ying Tse-Yu Sze
 August W. Volk
 Fong Teh Yeh
 Min-Shou Zhen

'15

Shahin Avdis Ajemian
 Yacoub Garough Almonian
 Mariano D. Catap
 Huang Chen
 Yu Mai Chu
 Louis P. Clark
 John H. Conditt
 Zu Chi Dage
 Edward C. Davis
 Cicero B. deMenezes
 Paolo De Vecchi, Jr.
 Roscoe G. Dickinson
 James F. Elliott
 Julian K. Ferguson
 Gooley Yue Fong
 Hamilton S. Frazine
 Reginald T. Friebe
 Charles S. Gardiner
 Stephen R. Holmes
 Benjamin Hurvitz
 TaKang Kao
 Benjamin W. Lassaff
 Peter Mann
 Huet Massue
 Norman L. Medhurst

Walter H. Monahan
Eugene Moness
Benjamin Nielsen
Ralph A. Noyes
Vincent O'Keefe
Louis F. Quirk
Walter B. Rivers
Henry E. Rogers
Gustao O. Schulz
Edward C. Spalding
Miss Jennie Tilt
Howard H. Wells
Royal W. Wetherald
Frederick R. Weymouth
Nathaniel P. White
Frederick F. Williams
Tsong-Kyien Yuan
Jeshine Zohn Zee

'16

William E. Adams
Blair G. Aldridge
Charles H. Beckel
Mrs. Eleanor J. Bell
Alexander Blair
Walter P. Boatwright
Daniel F. Callahan
Lewis A. Carman
Arthur R. Cornahan
Leon S. Chaladow
Chi-Che Chu
Tso Shang Chu
Yen Shou Chun
Miss Daisy L. Clark
Karl E. Engstrom
Erwin Escher
José M. Garcia
Gonzalo Garita, Jr.
King G. Gillett
Walter G. Goodwin
Murray G. Graff
Horace E. Hall
Frederick C. Holbrook
Spencer D. Hopkins
Elwell Horbakowsky
Abraham J. Krachmalnikoff
Harry L. Lavine
Charles E. Lawrence
Charles W. Leeper
Ping Yok Loo

Cleveland S. Loper
Pellian Teh-che Mar
Gotthold H. Meinzer
Joseph Neiman
Charles T. Paugh
Percy C. Peters
Max L. Rafeld
Shi Shun Raymond
Marshall J. Root
Christy Sakell
Gustavo A. Saladradas
Kazu Shogenzi
Philip Smith
Louis W. Stevens
Bruce N. Stimets
Shui Tao Tai
Francis J. Wall
Edward W. Wheeler
Roger Williams
Shao Fong Wong
Tsoo Wong
Benjamin H. Woodruff

'17

Ketchum A. Alexander
Ernest B. Allen
Ernesto Antunez
Cedric H. Beebe
Joseph L. Colalero
Benjamin Chalfen
Walter L. Clark
Mason L. W. Craig
Everett J. Davidson
Michael J. Dumit
Ralph Henkle
Ferdinand J. Kruss
Frank A. Libbon
Walter M. Lyon
Frank Edward McKone
William Ogrian
Edison F. Sawyer
Selden W. Seneter
Sidney E. Stuart
Edward I. Valentic
Richard P. Ware

'18

Dana Avery Barnes
Erik Grove Bildsoe
David La Tourette Brown

Edward Brown
James John Byzantius
Julio Eduardo Caicedo
John Leslie Cameron
Lee Ting Chen
Ying Chang Cheng
Frederick Sylvester Cross
Ingraham Curtis
Charles Everett Dimock
Enslo Smith Dixon
George Louis Ebert
Edward Ellsberg
Yer Ping Foo
Fransford Fransson
James Joseph Haverty, Jr.
Harlan Blake Heath
Earle Woodman Horton
Chuan Yuan Hsu
Ensign Cornelius Van Sant-
wood Knox
Rubin Levene
Jared H. Miller
Clinton Douglas Moore
Winthrop Eliot Nightingale
Frank Leon Philbrook
Alfred Newell Pray
Miss Ella Charlotte Rogers
Joseph Wansker
Eugene Francis Wermuth
Arthur Sease Williams
Badrig Barsam Zulalian

'19

Charles Joseph Barrios
Gilbert Francis Beers
Will W. Boyer
Philip Renwick Brown
Robert Lee Gilmore
Henry Simmons Hadley
Shao-Yu Hung
Vernor Blackmore McClurg
Herbert Carl Muther
Felix Louis Omelich
Chen-chi Pan
Francesco Pastorino
Webb Counie Patterson
F. D. Porcher
Charles Wallace Scranton
Hyman Nathan Shapero
Seiichi Uchida

MEETINGS OF THE COUNCIL

THE seventy-second meeting of the council was held in Walker Memorial on October 27, 1919, at 7.45 P.M. The meeting was called to order, in the absence of the president, by the vice-president, George L. Gilmore, '90.

Upon the recommendation of the Executive Committee, it was voted, That the annual dinner be held in the Walker Memorial on the second Saturday of January, January 10, 1920.

Upon the recommendation of the Executive Committee, it was voted, That the by-laws be changed to provide for the change in dues from two dollars to three dollars.

A letter concerning membership in the Association of Graduates of the Military Schools held at the Institute during the war was presented from the Executive Committee and upon a motion duly made and seconded, it was voted, that the Chair appoint a special committee of three to consider the question. The Chair appointed the following committee: Kenneth Moller, chairman, Charles B. Breed and Arthur R. Stubbs.

The Committee on National Service made report through its chairman, Mr. J. W. Rollins, who in presenting the financial report made a recommendation that the balance of the funds be turned over to the War Records Committee. Upon a motion duly made and seconded, it was voted, That the report be accepted and that the thanks of the council be extended to the committee and the Woman's Auxiliary by the secretary.

Upon a motion duly made and seconded, it was voted, That the report of the accounting of the Massachusetts Institute of Technology Committee on National Service be accepted and that the action of the committee in every particular be approved.

The Committee on War Records made report of progress through its chairman, Professor Tyler, who introduced Capt. John H. Ruckman, editor of the War Records. Captain Ruckman made a financial statement and gave a report on the procedure of the committee.

Mr. J. W. Rollins, '78, made report for the committee on a memorial to Technology men who lost their lives in the service. He read two suggestions offered by other members of the committee, one that a dormitory be raised and named in memory of those who had fallen and another that a memorial be erected that would not have material use but might range from a tablet to a large monumental structure in the Great Court. These two opinions having been read, members of the council were asked to make further suggestions to the committee.

The seventy-fourth meeting of the Alumni Council was held on Monday evening, November 29, 1919, in the Walker Memorial, Cambridge, Mass. The usual informal dinner was served at 6.30 P. M. with an attendance of thirty-four. Mr. I. W. Litchfield, '85, was salad orator.

The meeting was called to order at 7.45, in the absence of the president, by the vice-president, George L. Gilmore, '90, with an attendance of thirty-nine.

The business on the call for the meeting was:

Report of the "Technology Plan."

Report from Advisory Council on Undergraduate Publications.

Communication from the faculty concerning Junior Week.

Report of committee on possible membership or association with Alumni Association of members of the Military School at Technology.

The chairman called upon Mr. Emerson, who made report of progress for the Alumni Committee on the Educational Endowment Fund.

He stated that the fund was considerably ahead of what was expected for January 1, namely the collection of \$3,000,000, and he stated that as of this evening, the fund now amounts to \$3,500,000, of which \$2,500,000 from over 4600 alumni has been gathered and \$112,000 from 2013 undergraduates. The balance of the sum had been gathered upon the basis of contracts according to the "Technology Plan." It was stated that more was expected from this contract plan and that the Annual Dinner scheduled for January 10 might truly be a jubilee dinner. Mr. Emerson stated as to how impressed he was with this idea of the "Technology Plan" but he thought it was too bad that it had to be started in connection with the collection of funds.

He gave an outline to the Council of how this plan originated and how it was developed by the Alumni Committee on the Educational Endowment Fund. He reported that members of the Executive Committee of the Institute stated that they looked upon this plan very favorably and hoped that the Alumni Council would take action which would help its progress and development.

Messrs. Moller and Dewey spoke upon this point and upon the motion of Mr. Dewey, it was

VOTED: That the president of the Alumni Council appoint a committee to consider and correlate the ideas of the alumni and to present them as a report for the aid of whatever body is set up for the administration of the "Technology Plan" and further to help that body in its administrative work.

The following communication from the faculty of the Institute was read:

"At the meeting of the faculty on Wednesday, December 17, the following resolutions were adopted:

"1. That the faculty, recognizing the value to student life of the activities referred to in the petition of the Student Committee, and being desirous of encouraging these activities in such ways as may best conform to the educational policy of the Institute, and being convinced that to attempt to hold these activities in the March vacation during the present academic year would jeopardize their success and cause a real hardship to the students responsible for them, hereby authorizes the suspension of exercises on Friday, April 16, and Saturday, April 17, 1920.

"2. That the President be requested to appoint a committee consisting of five members of the faculty which shall consider the Junior Week activities as given during the present year, and shall

co-operate with students and alumni in making arrangements to hold these activities in the March vacation during the year 1920-21. They shall also assist in making these activities successful, and shall make recommendations to the faculty as to the most appropriate time for holding these activities thereafter.

"3. That the President be requested to invite the Institute Committee to appoint a committee consisting of three students, and the Alumni Council to appoint a committee consisting of three alumni, these two committees to form with the Faculty Committee a joint committee to consider all questions relative to Junior Week activities.

"4. That these resolutions be printed in *The Tech*, and that a copy of them be sent to the Alumni Council for presentation at its next meeting.

A. L. MERRILL,
Secretary."

VOTED: That the secretary send the following resolution to the faculty as an expression of the satisfaction of the Alumni Council in the manner with which the question of Junior Week activities was dealt with by the faculty of the Institute.

RESOLVED: That the Council of the Alumni Association of the Massachusetts Institute of Technology express its satisfaction and appreciation of the co-operative spirit shown by the faculty in its solution of the problem presented by the petition submitted to the faculty of the Institute by the undergraduate body concerning student activities and the request that special days be granted them from the school days of the third term of the school year 1919-20.

Further be it RESOLVED: That Messrs. Emerson, Glidden and Macomber be delegated to represent the Council appointed upon the Joint Committee of faculty, students and alumni.

RESOLVED: That the secretary of the Alumni Council communicate this resolution to the secretary of the faculty.

The Advisory Council on Undergraduate Publications made the following report:

At the April, 1919 meeting of the Alumni Council it was voted that the financial interest of the alumni in the publication of *The Tech* end as of April 1, that its affairs up to that date be liquidated, that direct control be given over to the undergraduate board as they could be organized to take it, and that the surplus accumulated during the period of alumni control after all just claims had been paid and allowances made, should be turned over to a duly constituted committee of the Alumni Council as trustee, to be administered through the treasurer of the Alumni Association by the Advisory Committee for the benefit of *The Tech*.

Mr. Paul Leonard, who, as representative of the Alumni Association, conducted the publication during the period of alumni control, reports that the instructions of the Alumni Council have been carried out, that financial interest by the alumni ceased on April 1, 1919, that direct control was given to and assumed by the undergraduates on July 1, 1919, that all just claims arising not only during his control but also under former student boards, to the best of his knowledge and belief, have been paid, and that subject to an audit of his accounts now being

made by Harvey S. Chase & Co., he stands ready to turn over as the Alumni Council may direct, funds and property substantially as follows:

Cash in bank.....	\$1,691.10
Accounts receivable (believed to be good)	96.06
Liberty Bonds and interest.....	1,041.50
Equipment as per inventory.....	1,187.45
	<hr/>
	\$4,016.11

Respectfully submitted,

G. D'W. MARCY, *Chairman,*

Alumni Advisory Council on Undergraduate Publications.

This report was accepted and upon motion duly made and seconded, it was

VOTED: That the Advisory Council on Undergraduate Publications is hereby authorized to receive from Mr. Paul Leonard the funds and property left from the publication of *The Tech* while under his direction as representative of the Alumni Association, that title to such funds and property be vested in the Alumni Advisory Council on Undergraduate Publications as trustee, that the funds be administered through the office of the treasurer of the Alumni Association by the Advisory Council as it may see fit for the benefit of *The Tech*, and that report shall be made in January of each year to the Alumni Council of the condition of the Trust Fund thus created, with a statement of receipts and expenditures.

The committee appointed to consider the question of membership or association with the Alumni Association of members of the Military Schools, held during the war at Technology, made through its chairman, Mr. Moller, a report of progress. He stated that the committee was of the opinion that membership should not be granted, that some arrangement, however, should be made of association between the alumni of these schools and the alumni of the Institute. Further, it was stated that a complete report might be presented at the next meeting of the council.

ADDITIONS TO THE ROLL OF HONOR JANUARY 15, 1920

October 31 — January 15

- AUSTRIAN, SELIGMAN B., '10. Corporal, Infantry. Killed in action in France, October 2, 1918.
LOWNDES, ANDREW J., '05. Captain, died in France.
ROBERTS, WILLIAM L., '11. Killed in automobile accident at Quincy, Mass., July 20, 1919.
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ADDITIONS TO THE CITED LIST

October 15 — January 15

- ATKINSON, C. E., '17, Captain. Cited in Local Orders.
BENBOW, D. F., '12, Captain. Citation from General Pershing.
BOHON, C. Laborer in Stock Room. Croix de Guerre and three citations in General Orders.
COFFIN, J. R., '17, First Lieutenant. Citation from Colonel Milling.
COTTER, C. S., '08, Private. Belgian Croix de Guerre; French Croix de Guerre.
DENNY, M. E., '08, Major. Mentioned in Despatches C. B. E.
DUGAN, W. E., Jr., '12, Captain. French Army Citation.
EDMUNDS, H. M., '05, Captain. Military Cross (British).
EMERSON, WILLIAM, Professor of Architecture. Chevalier of the Legion of Honor.
JOHANSEN, E. L., '20, Lieutenant (Junior Grade.) Navy Cross.
LOOMER, H. N., '19, Sergeant. Battalion Citation.
SHAW, H. D., '14, Lieutenant (Junior Grade.) Italian War Cross.
STEVENS, G. P., '98, Captain. Italian Army Service Decoration.
TYLEE, A. K., '07, Lieutenant-Colonel. Officer of the British Order of the Empire.
WAITT, A. H., '14, Captain. Letter of Commendation from Chief of Chemical Warfare Service, and Letter of Commendation from Acting Chief of Engineers, American Expeditionary Forces.

NEW METHOD OF CONDUCTING COURSE VI-A

Greater widespread interest among the engineers

ON the opening day of the new term, January 5, 1920, students in Group A of the Co-operative Course in Electrical Engineering, who had been at Lynn for a full term, returned to the Institute. The new plan for conducting the work at Lynn has proven a decided success. The officials of the General Electric Company have proven their desire and ability to co-operate in this plan to a degree which has been very gratifying. The superintendents of the several shops have carried out the high ideals of the originators of the Course. No pains have been spared to make the stay of the students at the Lynn works a period of educational progress. The production of work has in every instance been secondary to the more important consideration of giving the best possible training for the education of engineers of the highest type. Officials of the company have given freely of their time to acquaint the students with the theory and practice underlying the production methods of the different shops. The students have had the advantage of a weekly lecture by different superintendents of the various shops. At all times the foremen and officers have taken the time to explain any point which has arisen in the day's work. Every opportunity has been given to students to become acquainted with not only the process of manufacture, but also the underlying reasons for particular methods. This has amounted to almost individual instruction for each member of the Course on any particular branch in which he was interested or to which his attention was called by some part of his daily work.

Two afternoons a week a member of the instructing staff of the Electrical Engineering Department of the Institute conducted a class on the Principles of Electrical Engineering. The material taken up in these classes was closely co-ordinated with the electrical features of the shop. In this work the class covered the equivalent of a half term's work in this subject as given at Technology. Accordingly when the men return to take up their studies in Cambridge they will be a half term ahead of their schedule in the subject of Electrical Engineering and they will have maintained uninterrupted study in this major subject.

On two evenings a week at the Thomson Club was given a course in the presentation of engineering projects to Boards of Directors. This feature has attracted widespread attention among the graduates of Technology and among the instructing staff of other engineering schools. During the term each man was twice given the task of presenting to the class some engineering project which the class as a Board of Directors discussed and voted upon, one member of the class acting as chairman of the meeting. From this work a decided improvement has been manifested in the ability of the men to talk on their feet and to present a subject in a persuasive and convincing manner. The importance of an engineer possessing this ability cannot be overesti-

mated. Older graduates of the Institute in particular are keenly interested in this phase of the work and have congratulated these young men who have had the opportunity of perfecting themselves in this important branch of engineering activities.

The Thomson Club, which has been set aside for the use of the members of this Course, has proven a delightful home. The young men thus thrown together at work and at the Club have not only made close acquaintances but have developed an "esprit de corps" which assures the successful future of the Course. The library of the Club has been augmented by a collection of technical books and works of general interest to an engineer so that there are at hand reference facilities and material for reading along broader lines. The Institute Library has subscribed to two engineering journals for use at the clubhouse and *The Tech* and *TECHNOLOGY REVIEW* have helped to keep the students in close touch with the Institute life. Another feature which has decreased the separation from the Institute has been the visit of Group B men to the Lynn works on the afternoons on which the officials delivered their lectures on manufacturing methods. Once a week the Department of Electrical Engineering furnished automobiles for the transportation of those members of Group B who wished to take the opportunity to listen to these lectures and to become acquainted with the members of the other section. In this way the students in the Course have gotten acquainted and have been able to exchange experiences. On the recent "Tech Night" at a Boston theater the students from Lynn attended in a body.

The classroom work has been so arranged that the men have Saturday afternoon and evening and Sunday free for recreation, which gives them an opportunity to spend the week-end out of town. In addition to this one or two other evenings a week are given up to recreation and opportunity for collateral reading.

Thus at all times the closest connection has been maintained between the life at the General Electric plant and the student life at Technology. Those in charge of the Course feel that this was one of the vital features in making the work a success and not only is every effort made to plan the work in the shops so that it supplements the work at the Institute but the work in Cambridge is so planned that it correlates and unifies the information and experience gained in both the shop and classroom.

All of the men in Group A have completed their machine-shop practice, one in addition to this has also completed work in the drafting room and has been transferred to the winding department. The transfer of men from one department to another has been worked out in such a manner that as soon as a man has acquired a sufficient amount of skill at one operation, or in one department, he is immediately advanced to the next in natural order. This enables a man to advance at a rate suited to his ability. The success of the Course is evinced in no better way than by the enthusiasm of the men enrolled in it. Life at the Thomson Club is very much like that of a small fraternity with its opportunities for quiet study and recreation. Here the men get to know the full meaning and value of team work in play and co-operation in business.

The present industrial crisis makes particularly opportune a word

concerning the ideals underlying the founding and conduct of the Course. The alarming rate at which the natural resources of the country are being depleted has made it imperative that the country at large depend almost entirely upon its manufacturing industries to sustain itself. We can no longer depend upon our exports of raw material to keep the balance of trade in our favor. These raw materials, the lumber, the ores and the oils, must be manufactured into finished products if the living expenses of the population are to be met. Our water powers must be utilized and new methods of using our oil and coal more efficiently must be devised. In all of this work trained engineers of the highest type become the most valuable asset of the country. It is these men who must operate the nation's industries, for these industries cannot compete with those of other countries unless they are conducted by men who have large vision and knowledge of manufacturing details and also have a thorough training in science. Not only must business be financially sound but the cost of production must be managed in such a way that the total cost of the finished article is low enough to compete with the products of foreign factories. For this second requisite the services of an engineer who has been trained in manufacturing processes are invaluable and his duties are multifarious. He must not only be familiar with the best methods of production but he must thoroughly understand the scientific methods of research which will enable him to take advantage of new discoveries and to continually better his methods of production. This need of the country for manufacturing engineers was stated very strikingly in a recent address by Governor Coolidge. "Our prosperity comes from our industry," he said, "and our industry cannot flourish unless it is directed with the highest intelligence. Far more in the future than in the past will this intelligence call for sound training in science and in its innumerable applications to industry. In this Commonwealth we are fortunate in having the Massachusetts Institute of Technology, one of the great assets of the nation, an Institute that attracts men in large numbers from every station in the Union, and sends forth well trained men to play a leading part in the developing of national resources."

Course VI-A has already given great promise of meeting the high ideals of its founders who had the vision of the impending need of the country and planned to meet it with a supply of engineers of the highest type, trained to apply their engineering knowledge to the processes and methods of manufacture.

The plan of operating the Course is as follows. Each class is divided into two groups, one group spending three months at the Lynn works, while the other is at the Institute carrying the regular Course VI work. At the end of three months the groups exchange places. A two weeks' vacation is provided at the end of each period at the Institute. The Course is operated in this way for three years. The work of the first two years consists of the regular curriculum of Course VI, the practical shop work not beginning until the third year. The summers of the sophomore and junior years are also spent in co-operative work. In order to complete the course the man must therefore spend five years for which he receives the degree of B.S. and M.S. The fifth year, however, will prove no hardship to any man inasmuch as members of

this Course receive practically \$1,300, the most expert instruction in advanced Electrical Engineering, carefully supervised manufacturing experience and a degree of M.S. as a reward of the extra year's work. It is unusual for a graduate of a four-year technical school to receive better remuneration for his first year's work out of school, so the members of this Course feel that they will be well recompensed for the additional year at the Institute, especially as they are prepared to thereafter make more than usually rapid progress in the manufacturing industries.

TECHNOLOGY AT THE PATENT OFFICE

From a letter from J. T. Newton, Commissioner of Patents

THE advantage of the scientific foundation in education afforded by the institutions of which the Massachusetts Institute of Technology is a leading example have long been recognized in the Patent Office. Sixty-eight graduates of that school have had prominent part in the work of the Patent Office during the last thirty-six years, ten of them who are now members of the corps having been in various higher grades up to those of principal examiners-in-chief for many years.

You may be interested in a few deductions from the experience of the Patent Office in retaining the service of graduates of your institution in competition with the business world. In the period of five years, 1905-1910, twenty-two graduates of the Institute obtained positions as Patent Office examiners, and at one time the total number of Institute alumni in the Patent Office was about thirty. After 1910, however, the number of applications from such men dwindled rapidly, and out of a total of thirty-four appointments made from 1905 to the present time, all but six have resigned and I am informed that each of those who have gone has found substantially higher remuneration in outside patent practice. The average stay of the thirty Technology graduates who have resigned during this period has been only three and one-half years, and the difficulty and expense of training new men to take their places I believe is such as to warrant the Government in paying the substantially larger salaries necessary to retain them.

The Patent Office needs more technically educated examiners of the thorough preparation that graduates of the Massachusetts Institute of Technology have always shown, and the profession of patent law also needs men of the same character. For these reasons I am strongly sympathetic with the movement to insure that the training of young men of such a high average efficiency is not interfered with by lack of necessary endowment funds for the Massachusetts Institute of Technology.

UNDERGRADUATE ACTIVITIES

WILLIAM B. BARROW, JR.

THERE are at least thirty-one hundred people in this world, all students of Technology, that fervently wish the present twenty-four-hour day might be stretched. In fact, to glance through the list of things that are going on at the Institute, one would be tempted to believe that there are a gifted few who have learned how to squeeze more than sixty minutes into the hour. Biggest of all our ambitions and pleasures, as well as worries, has been the Endowment Campaign. It has been a great experience, to live in the heart of a four-million-dollar ambition, and it certainly looks as though the undergraduates were going to do all in their power to make their share a worthy one. Doubtless you will read elsewhere of the ultimate figures, the latest grand totals. As this is written the big bulletin in the lobby shows seventy-two per cent of the enrollment subscribed, to the amount of \$114,303.08, an average subscription of \$55.80. A last effort is being made to pledge the remaining twenty-eight per cent of the students this week. Intensive campaigning of the dragnet type is expected to round up the buttonless lapels and induce them to share in the splendid work. Nearly all of the societies and activities have pledged one hundred per cent of their membership, as well as a large number of sections in the freshman class. The aim of the Undergraduate Committee is a one hundred per cent pledged Institute, and they are going after it hard in these few days left for campaigning. A preliminary list of undergraduate subscribers has been published.

Besides holding mass meetings and conclaves for the furtherance of the campaign, the professional societies have been having a fall season teeming with interesting trips, talks, and excitement. Early in the term all the societies got together and organized a "Join-Your-Society Week," during which space of time any and all persons found meandering in the halls were forced to produce a membership card in some one of the numerous societies, or satisfactorily explain the reason why not. The campaign was a success. All of the societies report such a fall enrollment as never has been before.

A unique feature of the Aeronautical Engineering Society, the youngest and liveliest of the lot, was the arrangement of a lottery among its newly joined members for the privilege of one out of two flights offered by the Curtiss Aviation Company at Bedford. The occasion of the flight was the first inspection trip of the society. C. Dandrow, '21, and O. Radcliffe, '22, were the lucky ones. Dr. S. A. Moss spoke again this fall on his Turbo-Supercharger, before a most interested audience. Another speaker of the term was Lieutenant-Colonel Drennan, who addressed the members on the making of a bird-man.

The radio-interested students found much profit as well as pleasure in the trips and tours of the Wireless Society. This society has tried this fall to emphasize the fact that it is a body of undergraduates

gathered together not for toying with the sets which are available, and playing around with no aim whatever, but for earnest, sober research and self-education along the lines of radio practice and radio development. Lieutenant-Commander Will was the first speaker of the season, using as his topic the Radio Compass. At another meeting the president of the Radio Relay League told the society of the plans for the larger work of the amateurs. Chief among the tours of the society was a visit to the plant of the American Radio and Research Corporation, located at Medford Hillside, where a great deal was gathered as to the latest methods in organization and development of a corporation for the construction of commercial and government apparatus. The society has the loan of several sets from the Navy Yard at Charlestown, one being of American Radio make, another by the Wireless Specialty Company, while several subsidiary instruments were of Marconi make. The laboratory is now a rival with that of the Harvard Society.

The Civil Engineers have been fortunate in having a lecture by Mr. G. F. Porter, on the story of the Quebec Bridge. So interesting was the subject that an invitation to all the students was issued, and a very large number availed themselves of the opportunity to hear the story of the bridge at first hand.

Besides many important business meetings, at one of which Kinghorn, '20, was elected to the position of treasurer, a place left open by the failure to return of last year's incumbent, the Electricals enjoyed trips to the Chestnut Hill Pumping Station, the General Electric Motor Works, and several other industries. Professors Webster and Franklin staged a most interesting demonstration of the uncanny properties of the X-ray, even frying eggs for the onlookers. The reports fail to state whether this was merely a demonstration with one or two eggs, or a real meal for the whole society. If the latter, it must have been quite expensive.

The Mechanicals have taken up most of their program during the fall with educational lectures along mechanical lines. One trip was taken to the Charlestown Navy Yard. The Miners have been following the same line of procedure. One particularly interesting talk was given them by Dr. R. H. Richards, '68, on "Glass Blowing."

The Chemical Society have taken up many of the war developments of chemistry in their series of meetings, two of the most interesting of which were by Professor Norris of the Chemical Department, and Mr. Norman Marshall of the Elastoid Fibre Company. Election of officers resulted as follows: president, R. L. Turner, '21; vice-president, M. M. Whitaker, '20; secretary, T. W. Bossert, '21; treasurer, J. J. Franck, '20; program committee, H. A. LaPointe, '21, A. P. Munning, '22.

A smoker was held by the Architects in the middle of October, and an extensive fall program was outlined. A very large part of the same has been carried out.

Among the clubs the principal item of note has been the birth of several new sectional clubs. Chief of these is the California Club, with an enrollment of thirty-four. J. W. Kendall, '20, is president; D. D. Spear, '22, is secretary; and H. R. Haines, '21, is treasurer. The club has for its object the gathering together for social intercourse those students whose homes are not only in California but in Oregon and Washington

as well. Another club of this nature is the Canadian Club, with a membership of twenty-three. The list of officers is not available.

Corporation XV has elected J. W. Gibson, '20, to the office of president, and H. Bugbee, '20, to the board of directors, positions left open by the failure to return of the former members.

The Rifle Club has been shooting up the basement of Walker Memorial almost every day. Officers were recently elected as follows; president, J. R. Perkins, '20; vice-president, M. C. Hawes, '21; secretary, L. J. Powers, '22; treasurer, K. B. White, '20; manager, G. G. Kearful, '22.

The Cosmopolitan Club has a membership of over one hundred men, representing thirty-five nations. M. E. Martinez, '20, is president. Several dances have been run off successfully.

Cleofan has inaugurated a series of invitation dances which bid fair to prove very popular. The popularity is unnecessary, however, for the gatherings are tres exclusive. You have to stand ace high with some one of the Cleofanites, or you don't get a bid. Cleofan and the Walker Club substantially aided the Endowment Fund with an evening of drama and dancing which was enthusiastically supported by the student body.

A new field has been tapped by the organization of a freshman philosophical society. The infant hails to the name of "Academia."

Masonic interests have been renewed with the reorganization of the Masonic Club. Officers have been elected: president, A. E. Tuttle, '17; vice-president, H. H. Fisk, '18; treasurer, N. D. Conniers, '19; secretary, E. G. Farrand, '18; executive committee, M. M. Whitaker, '20, F. P. Reynolds, '19, W. R. McKenny, '20.

Important as the purpose and powers of the organization are, the Institute Committee has wasted a great deal of time this fall in the consideration of innumerable non-essentials. It is to be hoped that the New Year will bring new ideals and viewpoints to the men who make up this largest of the Forums of the Institute.

Coming back strong from the defeat of last year, the Class of 1922 carried away all the honors of Field Day. A hotly and closely contested crew race went to the Sophomores by a third of a length. The relay race followed the same course, with '22's last man breaking the tape thirty-seven yards in front of his Freshman rival. Only two pulls were necessary to decide the tug-o'-war. In the final struggle, the football game, the Sophomores won, 12-7. Johannson was the star of the Sophomore team, Richards for the Freshmen. The field was very slippery, and it is a wonder that either side scored at all. Boxing bouts finished the day, H. Rosenfield and W. Corbett, winning points and cups for the Junior Class.

Shuberts' Gaieties of 1919 was the show chosen for Tech Night. The Majestic Theatre was crowded and as a whole the crowd was well behaved. There is no question but that the revue was thoroughly enjoyed by every one, no matter what the class numerals in front of their section. Subscriptions to the Red Cross were freely given. A quartet composed of N. G. Abbott, '20, A. L. Johnson, '22, F. D. Gage, '21, and K. F. Akers, '20, led the singing of Tech songs. Cheers for and by all of the classes, from '18 to '23, were frequent and emphatic. George Jessel starred in the play.

To the office of treasurer of the class of 1920, D. L. Fiske has been elected. M. B. Knox has been elected to the executive committee.

The Freshman Class merged their annual smoker with the All Technology Smoker, on account of the police disturbances in Boston. About the middle of the term officers were announced as follows: president, R. P. Shaw; vice-president, F. G. Clement; treasurer, W. L. Stewart; secretary, A. R. Holden; institute committee, R. E. Dodd and C. A. Brantingham; executive committee, W. K. Coolidge and C. H. Hewitt.

Voodoo has come forth with two issues of fun and "funnies" this fall. Development and improvement over last year can easily be seen, although the jokes might reflect more credit on the editors were more of them original and a lower percentage of them clipped. The art department shows promise, as one look at the cover designs will show.

Technique has been saying nothing, but sawing a lot of wood. The year-book was reported at exam time as being over fifty per cent complete. Nearly all of the advertising space has been placed. Waldo Adams, '21, has been elected faculty editor, and C. C. Carven, '21, with M. F. Farren, '21, have been elected assistant art editors. The board promises a Technique that will surpass all previous, and the students are looking to them for a fulfillment of the promise.

The Tech has been busy during the fall with editorial troubles, smokers, banquets and special editions. Besides all this came the thirty-eighth anniversary and the opening of Volume XXXIX. An honor system of distribution was tried out, in which the subscribers used self-service to secure their copies. Tables were scattered about at the various doors of the buildings, and a supply of *Techs* piled thereon. Like the nigger's catfish, the pile "swunk all up," but the coin box refused to yield the corresponding amount of cash and coupons. Since *The Tech* is not a charitable publication, the plan has been partially adandoned.

Fall Tennis Finals resulted in T. H. West, '21, winning the singles, with W. A. Caldwell, '22, and H. S. Colton '21, winning the doubles. R. B. Miller, '22, was runner-up in the singles; H. Beattie, '22, and M. B. Beattie, '23, in the doubles.

Paul N. Anderson, '21, is president of the Massachusetts Institute of Technology Athletic Association. Garvin Bawden, '21, was elected vice-president, while R. Skinner, '21, was elected secretary.

A Gymnasium Team has been organized and promises much for their season which began with the New Year. Dr. David Montgomery has been secured for coach. Among the best on the team are Pew, '22; McKinstry, '21; Rafferty, '22; Humphrey, '22; Follinsbee, '22; Walton, '22; Wood, '21; Phillips, '21; and Bower, '20. Meets are planned with Yale, Cornell, Pennsylvania, Tufts, Brown, and many other large Eastern colleges.

Cross country competition has shown our group of harriers to be capable of quite creditable work. In the Intercollegiate meet at Syracuse, Technology came third, beaten only by Princeton and Syracuse. New Hampshire won from us in a dual meet, 23-32. The Intercollegiate Meet held in Belmont on November 22 was a real disappointment, as Technology only finished in eighth place. The Cross Country Team was made up of: W. K. MacMahon, '22, Capt. H. R. Dorr, '20, C. L. Stone, '21, A. L. Flanders, '22, H. J. Murray, '20, E. J. Purcell, '22, and

D. F. Carpenter, '22. MacMahon was the star of the team, and has been elected captain for next year.

C. D. Greene, '21, has been elected captain of the Swimming Team.

Allen Brantingham, '23, was chosen captain of the Freshman Football Team. The season as a whole was not very encouraging, the one redeeming feature being that all of the defeats came by close scores.

C. H. Talcott, '21, is track manager for the year.

With the opening of the skating rink just across Massachusetts Avenue from the Institute, interest in hockey has been revived. A team is in the process of formation and a schedule is being arranged. Tufts, Boston College and other local colleges are on the schedule, as well as Dartmouth, Amherst, and Cornell.

Two Dorm dances have been offered to those socially inclined, and both have been splendidly subscribed to. The second one was sold out of tickets in two days. The Walker Club is planning a series of formal affairs for the spring, and indications point to unquestionable success. Cleofan and the Walker Club ran a joint dance that was well attended.

Mr. and Mrs. Maclaurin very thoughtfully opened their home to those students detained here over the Christmas holidays. A house party was given them on Christmas Eve. As usual, President and Mrs. Maclaurin were acclaimed excellent entertainers.

The Tech Show is progressing. Scenarios have been submitted and early in January will come the Kommers Smoker at which the lucky playwright and his product will be named. After the success of last year the management will have to do well, indeed, to make a record for themselves, yet confidence is the keynote of the whole organization and there is no doubt but that the final product will be one more than worthy of Tech Show traditions.

Several concerts have been held by the Musical Clubs. They have met with cordial and enthusiastic audiences, and are now all primed for the winter concert, which is to be held in the near future. An exceptionally large number of candidates have come out this year, and the talent displayed by both the gleers and the instrumentalists is excellent.

Thirty-six delegates were sent by Technology to the Student Volunteer Convention in Des Moines, Ia. The convention is held quadrennially, and is a forum for the discussion of the relation of the student to religion, particularly missionary and social welfare work.

The Red Cross drive at Christmas time netted \$1100, presumably the highest record of any of the colleges. Eight fraternities subscribed one-hundred per cent. This was in spite of the fact that the Endowment Campaign was at the peak of its progress.

PHOTOGRAPHS OF JUNE REUNIONS

SOMEWHERE in this issue are some photographs of the 1889 and the 1898-99 reunions last June. The editor received them — mislaid them — forgot them — found them — publishes them — and apologizes!

THE TECH ENGINEERING NEWS

A new and promising undergraduate publication

FEBRUARY 15 marked the publication of the first issue of *The Tech Engineering News*, a monthly publication designed to do the work which *The Technology Monthly* was never able to accomplish, of offering to undergraduates and alumni alike an engineering publication written and edited by Tech men primarily for Tech men, conceived in a rather more popular vein than the well known *Harvard Engineering Journal*, but with the same authority and accuracy behind its articles.

The first issue, which met with general approval of the instructing staff at the Institute and sold over fifteen hundred copies to the undergraduates, had a variety of interesting and informative articles, technical papers from the Eastman Kodak Company, the A. D. Little Co. and Prof. W. H. Walker, the new director of the Technology Plan; general articles by well known engineers, Wesson, '83, and Rourke, '95; an industrial discussion by Henry Endicott, the most successful labor arbitrator in Massachusetts; an undergraduate technical article; new and unpublished alumni notes; and a carefully prepared page of recommended readings in the chief engineering and technical journals, indexed according to subject.

The table of contents is as follows:

PAPER FROM BAGASSE,	Clarence J. West
AN AMERICAN SOURCE OF ORGANIC CHEMICALS FOR RESEARCH.	
WILD ENGINEERING I HAVE KNOWN,	David Wesson, '83
MODERN METHODS OF DEALING WITH LABOR,	Henry B. Endicott
THE PREVENTION AND CURE OF THE RED WATER PLAGUE,	
	William H. Walker, Ph.D., Eng.D.
POSSIBILITIES FOR CIVIL ENGINEERS IN SOUTH AMERICA,	
	Louis K. Rourke, '95
THE SCIENTIFIC DEVELOPMENT OF THE STEAM LOCOMOTIVE,	
	H. F. Hedburg, '20
KNOWLEDGE FOR SERVICE,	Hervey W. Shimer, Ph.D.
ALUMNI COLUMN.	
RECOMMENDED READINGS.	

The editors, many of whom are also editors of *The Tech*, although the new paper is a distinctly separate venture in its policy and organization, hope to obtain a large circulation among the alumni as well as the undergraduates, and to this end copies of the first issue are being distributed freely among the alumni. If you have not received one, a postal card to the Circulation Manager, *The Tech Engineering News*, Cambridge, Mass., will bring you a get-acquainted copy.

In its prospectus the new journal gives a clear and persuasive account of its proposed activities—and there is no doubt but that its first issue, laboring under the difficulties incident to all first issues, sets a good pace for the following issues. The editors write as follows:

"The purpose of the paper will be to keep its readers informed of current events of interest in the field of industry, the most recent advances in engineering science, and of the results of researches and original investigations. It will aim to develop in the students at the Institute a better knowledge of the actual conditions of industry which they will meet upon graduation, and to interest them in the current progress in the different branches of science.

"We plan to publish a number of short articles in each issue, and a few of slightly greater length describing some new achievements in science or industry, written simply so that they may be read without effort and will interest the majority of the readers. We shall be glad to publish articles or communications from any one interested in the Massachusetts Institute of Technology, or the objects sought by this paper, and sincerely hope that there will be many to take advantage of this opportunity to address the undergraduates.

"The following list is given as a suggestion of the field which we hope to cover:

Recent progress in the various branches of engineering.

New engineering problems and their solution.

New contracts or undertakings in industry.

New methods of production.

New products and processes.

New methods of administration.

Financing of new undertakings.

Expansion into new fields.

Development of foreign markets.

Labor problems and their solution.

"*The Tech Engineering News* is not a successor to and has no connection with either *The Technology Monthly*, *The Science Conspectus*, or *THE TECHNOLOGY REVIEW*."

The subscription price is only a dollar a year, ten cents per issue, a remarkably reasonable cost for a magazine of any worth today. The alumni are urged to look into it, and to take to heart the following letter addressed to them directly by the Editorial Board.

AN OPEN LETTER TO THE ALUMNI

This issue of *The Tech Engineering News* reaches three thousand of the alumni. Succeeding issues will undoubtedly reach a much larger proportion.

To you among the alumni who have an interest in the welfare of Tech men, graduates or undergraduates, this appeal is addressed.

If you encounter anything which it would be well for Tech men to know, tell us about it.

If you discover a better way of doing something Tech men are doing, or an opportunity of which Tech men might take advantage, send us a brief account of it.

A few words are all that is needed; just sit down, when you think of it, and write an intimate personal account which will reach friends and acquaintances throughout the country.

Thus *The Tech Engineering News* may prove a further bond between Tech men everywhere. Yours truly, C. B. Capps, General Manager.

TO THE ALUMNI

A statement by the management of the Tech Show, 1920

THE prospects for Tech Show 1920 are by far the brightest of those for any show in recent years. To date excellent progress has been made. All of the management competitions are well under way, and have all shown a substantial increase in the number of competitors. The cast try-outs have been completed, and the rehearsals proper begun. The chorus and ballet competitions, while not yet actually in progress, give most excellent promise.

This year's production is being coached by Mr. John Craig, owner of the Arlington Theater, and the foremost producer in Boston, with assistance of his wife, Miss Mary Young, and Mr. Harry Gribble, who has been for some time Mr. Craig's assistant producer. To those familiar with the Boston theatrical world Mr. Craig needs no introduction. He has produced many well known plays at his Arlington Theater, of which "Common Clay" will be remembered as one of the best. Miss Young has been leading lady in the Arlington Stock Company for some years, and has, at the same time, had charge of all of Mr. Craig's musical productions. Mr. Gribble is better known as an author than as a producer, having written a number of plays, the most recent of which, "The Outrageous Mrs. Palmer," has just been put on by Mr. Craig at the Arlington Theater.

The Show itself is a musical comedy in two acts entitled "Patsy," by C. C. Carven '21, Course IV, of Dorchester, and amounts to a burlesque of ancient Egyptian life as it might have been, with modern improvements. While keeping wholly in the lighter vein, the play has nevertheless a distinct and ingenious plot that places it above the average production of this kind. The lines themselves are bright and well turned; the opportunities for interpretation much in advance of former shows. The music, as so far turned in, is excellent, using to the full the value of the Egyptian setting. The scenery, which will consist principally of a set in Cleopatra's palace, is under process of design by the Course IV men, there being more than thirty men at work upon sketches. The wealth of opportunity in the Show, however, is largely due to the author, whose two years' previous experience in the chorus has stood him in good stead.

The stage department this year has adopted the policy of completing the cast try-outs before beginning either the chorus or the ballet, thus giving additional opportunity to those men who fail to make the cast. As there are several minor non-speaking parts in the cast, these will serve this year as positions for the understudies, a most satisfactory arrangement.

"Patsy" will be produced in Boston matinee and evening on the last day of Junior Week, Monday, April 19, which is Patriots' Day. While no theater has yet been settled on, it is hoped that the Boston

Opera House may be procured. As heretofore the Show will open in Northampton. The date set is Saturday, April 17.

In the past the alumni have always supported the Show generously, and this year, owing to the favorable circumstances in which the Show finds itself, the management promises that the Show will be more than worthy of whatever support the alumni will be able to give.

TECH'S GREAT WORK

From The Boston Post

THE Massachusetts Institute of Technology has marshalled its great resources to aid the industries of the country and has created a new division for this purpose under the head of Dr. William H. Walker, a proven instructor of scholarly attainments and long-trying experiences.

This is a commendable movement sure to bring the institution on the Charles a national reputation. Already one hundred and twenty of our largest industries have both given their approval and assured their assistance. The need for such a training for young men goes without question, while its prospective value to enterprise, progress, and real accomplishments, is beyond even estimation. Business is more in need of strengthening influences than ever, and the development of practical efficiency is a prime necessity today since our new order of activities brings us more directly into competition for the world's market.

A more important step could not have been taken. The equipping of our young men for great commercial enterprises and the providing of such life opportunities is so full of wonderful promise that it is strange that such a practical and thorough system of education has been delayed until this time.

There are no limits to the possibilities and President Maclaurin is entitled to the gratitude of the young men of the country as well as the congratulations of our captains of industry. It is great work and must command all the best wishes of the nation for its continuous success.

PUBLICATIONS OF THE INSTITUTE STAFF

- BARROWS, H. K. "The Ipswich Water Supply of the City of Lynn." Municipal and County Engineering. September, 1919.
- BLANCHARD, ARTHUR A. "Laboratory Instruction in Chemistry; Its Aims and Its Limitations." Science. P. 6. August 1, 1919.
- BUSH, V. "Gimbal Stabilization." Journal of Franklin Institute. Vol. 1919. P. 199. Illustrated. August, 1919.
- DAVIS, TENNY L. "Some Factors Bearing upon 1, 6 Addition." Journal of the American Chemical Society. Vol. XII. P. 1132. July, 1919. "A Question Concerning the Nature of Velocity." Science. Vol. L. Page 338. October 10, 1919.
- GOODWIN, H. M., and W. G. Horsch. "Electrical Conductivity and Other Properties of Saturated Solutions of Copper Sulfate in the Presence of Sulfuric Acid." Chemical and Metallurgical Engineering. Vol. XXI. August 15, 1919.
- HOFMAN, HEINRICH O. "Lead." The American Year Book for 1918. Appleton, New York. 1919. "Metallurgy of Lead." Engineering and Mining Journal. Vol. 107. 1919. "Recent Improvements in Lead Smelting." Universal Industry. Vol. XXVII. 1919.
- HORWOOD, M. P. and Jules Schevitz. "The Oklahoma City Public Health Survey." Oklahoma City, Okla. 157 pages. Illustrated. Size 6 x 9. September, 1919.
- HOSMER, GEORGE L. "Geodesy." New York. 368 pages. Illustrated. Size 9 x 6. July, 1919.
- HOVGAARD, WILLIAM. "Buoyancy and Stability of Troop Transports." Society of Naval Architects and Marine Engineers, New York. November 14, 1919.
- JONES, WILLIAM F. "A Geological Reconnaissance in Haiti." Journal of Geology. Vol. XXVI. Pp. 728-752. Illustrated. November, December, 1918.
- KENNELLY, A. E. and Edy Velander. "A Rectangular-Component Two Dimensional Alternating-Current Potentiometer." The Journal of the Franklin Institute, Philadelphia, Pa. 26 pages. Illustrated. Size 9 x 6. July, 1919. "Alternating-Current Planevector Potentiometer Measurements at Telephonic Frequencies." Proceedings American Philosophical Society. Vol. LVIII. 1919. 36 pages. Illustrated. Size 6 x 8 $\frac{3}{4}$. July 22, 1919.
- KENNELLY, A. E. "The Speed of Electricity." The Wireless Age. New York. 7 pages. Size 5 $\frac{1}{2}$ x 8 $\frac{1}{2}$. August, 1919.
- MACINNES, D. A. and A. W. Contieri. "Some Applications of the Variation of Overvoltage with the Pressure." Proceedings of the National Academy of Sciences. Vol. V. P. 321. Illustrated. August, 1919. "Hydrogen Overvoltage II. Applications of its Variation with

- Pressure to Reduction, Metal Solution and Deposition." Journal of the American Chemical Society. Vol. XLI. 2013. Illustrated. December, 1919.
- MACINNES, D. A. "The Activities of the Ions of Strong Electrolytes." Journal of the American Chemical Society. Vol. XLI. 1086. July 1919.
- MILLER, EDWARD F. "Notes on Heating and Ventilating Engineering." The Technology Press, Cambridge. 168 pages. Size $8\frac{1}{2} \times 11$. Illustrated. October, 1919.
- NORRIS, JAMES F. "The Manufacture of War Gases in Germany." Journal of Industrial and Engineering Chemistry, Vol. II. P. 817. Illustrated. September, 1919.
- PASSANO, L. M. "Double Haunt." Pagan, Vol. IV. No. 1. May, 1919. "Old See Yourself." Pagan. Vol. IV, No. 5. September, 1919.
- SHIMER, H. W. "Samuel Wendell Williston." Proceedings American Academy of Arts and Sciences. Vol. LIV. P. 421. September, 1919.
- SPEAR, ELLWOOD B. "Some Problems of Gas Warfare." The Scientific Monthly. 9 pages. Illustrated. March, 1919.
- SPOFFORD, CHARLES M. "Reconstruction and the Engineer." Journal Boston Society Civil Engineers. Vol. VI. P. 139. April, 1919. "The Boston Army Supply Base — General Data." Journal Boston Society Civil Engineers. Vol. VI. P. 125. March, 1919.
- TALBOT, H. P. "A Brief Survey of Some Recent Chemical Literature." Science. Vol. L. No. 1289. P. 253. September 12, 1919.
- THOMPSON, M. DEKAY. "Potassium Permanganate from Ferromanganese by Electrolysis." Chemical and Metallurgical Engineering. Vol. 21. Pp. 680-681. November 26,—December 3.
- TIMBIE, W. H. and H. H. Higbie. "Principios de Electricidad." Spanish Edition of "Essentials of Electricity." Madrid, Spain. Vol. 1. 280 pages. Illustrated. Size $5\frac{3}{4} \times 9$. October, 1919.
- TREADWELL, F. P. and William T. Hall. "Analytical Chemistry." Vol. II. Anantitative Analysis. Pp. 940. Illustrated. 1919.
- WILKES, GORDON B. "An Apparatus for Determining the Thermal Conductivity of Metals." Chemical and Metallurgical Engineering. Vol. XXI. No. 5. Pp. 241-243, Illustrated. September 1, 1919.

TWENTY-FIVE YEARS AGO AT TECH

PRESIDENT WALKER's report was issued. It showed that the financial condition of Technology, while considerably improved during the year past, was, nevertheless, such as to cause no little anxiety on the part of the Corporative Board. In view of the gravity of the situation a petition was sent by the Board to the House of Representatives of the State of Massachusetts asking for a yearly appropriation extending over a period of six years.

NEWS OF ALUMNI ASSOCIATIONS

AKRON—THE M. I. T. CLUB OF AKRON, OHIO.—During the last month the main activity of the Akron Technology Club has been to do its share in raising its quota of the Technology Endowment Fund.

A total membership of 55 members have raised \$34,000 and all have not placed their subscriptions to date. A few members are still to be heard from and we feel certain that Akron will be put down on the 100 per cent list.

In addition to the above, the Goodyear Tire & Rubber Company donated an additional \$50,000 in appreciation of the services Technology men have rendered the Company. When January first arrives the committee feels that Akron will have at least \$85,000 subscribed for the Endowment Fund.

At our last meeting it was voted to invite the Combined Musical Club to give a concert in Akron while on their trip. This concert will take place some time in March, but the exact date has not been announced.

The committee to make all arrangements for this concert consists of: Messrs. W. N. Drew, chairman, W. J. Kelly, and R. J. McLaughlin.

The above items cover the important doings of the Akron Technology Club.

We wish to extend a cordial invitation to all Technology men who are in Akron and have not affiliated with us, and also request men who drop in Akron for a few days, to get in touch with me, as we may be able to make their stay more pleasant and this would also help arouse the interest of our club.—*W. H. Fleming, Secretary, 350 Wildwood Avenue, Akron, Ohio.*

CLEVELAND—TECHNOLOGY CLUB OF NORTHERN OHIO.—The Cleveland Technology Club has had weekly meetings each Friday at the City Club, from which Mr. F. A. Smythe has directed the efforts of nine or ten active Alumni in raising Cleveland's quota of the Technology Endowment Fund.

On Friday, December 19 this Club will hold its last meeting and hopes to clean up what stray ends have been left; to be followed by a general meeting of all Technology men in Cleveland, some time the early part of January.—*B. V. Zamore, Secretary and Treasurer, 702-5 1900 Euclid Building., Cleveland, Ohio.*

DULUTH—TECHNOLOGY CLUB OF LAKE SUPERIOR.—The Lake Superior Alumni Association held its first meeting, since the war, at the Kitchi Gammi Club on November 15. The following men were present: Carrol Strets, 1908, J. A. Noyes, 1912, H. I. Pearl, 1911, Walter Zimmerman, 1898, W. R. Peyton, 1892, D. H. Radford, 1912, W. C. Lounsberry, 1904 and C. D. Brewer, 1902.

Mr. Pearl of the class of 1911, who makes his home at Crosby,

Minn., came down for the first meeting with us. We also had Mr. J. A. Noyes of the class of 1912 who was with us for the first time. Our friend, Mr. Clapper, of Two Harbors, was missed, for he had been a regular attendant at all meetings. Mr. Cerf, who had been with the Minnesota Steel Company for a number of years, has left this territory. Mr. Frank Hayes of the class of 1892, who lives in Superior, was reported as being under doctor's care at Milwaukee. We hope to hear soon that he has regained his health and will be with us at the next meeting. Our friend, Samuel B. Sheldon, was in the Club at that time but his social secretary, Mrs. Sheldon, had made other plans for him so he was missed while at the table.

After the usual reminiscence the conversation gradually drifted to the drive being made by the Alumni Association and many suggestions were made as to how to go about the raising of funds in this territory. The next meeting will probably be held in January.—*Charles. D. Brewer, Alworth Building, Duluth, Minn.*

TECHNOLOGY CLUB OF FALL RIVER.—A special meeting was held on November 6. Mr. George Gibbs entertained with a very interesting description of his activities with the Technology Union at Paris during the war. He also spoke at some length about the Technology Fund drive, and plans were discussed for arousing the interest of all local alumni. Representatives were present from other towns of the district.

On November 24, Dr. Richard C. Maclaurin was the speaker at a well attended meeting at the Quequechan Club rooms, at which a number of Fall River's prominent mill executives were consulted concerning the contract plan of co-operation between Tech and industrial corporations. Dr. Maclaurin gave a comprehensive outline of Technology's history and the problems which have necessitated the present drive. An informal luncheon and discussion followed. Representatives from New Bedford and other nearby cities were present.

Fall River's part in the drive is progressing rapidly and a good financial showing is expected.—*A. E. Hirst, '13, Secretary, 55 Madison Street, Fall River, Mass.*

HARTFORD.—TECHNOLOGY CLUB OF HARTFORD.—The importance of the technical man of today and his ultimate value to future industry was the keynote of a public meeting in the interests of the Technology clubs of Connecticut, held in the assembly hall of the Hartford Club Wednesday night, December 4, to further the financial campaign of the Massachusetts Institute of Technology. Addresses were made by Otto Kahn of New York, and General T. Coleman Du Pont, both trustees and members of the corporation of the Massachusetts Institute of Technology; Dr. Richard C. Maclaurin, President of the Institute; and Everett Morss, member of the Institute's budget committee, and president of the Simplex Electric Company of Boston. Hiram Percy Maxim presided. A dinner at the club, given by Mr. Maxim, preceded the meeting.—*G. W. Maker, Secretary, Box 933, Hartford, Conn.*

MANCHESTER—TECH CLUB OF NEW HAMPSHIRE.—June 29, 1919, is a date that will long live in the memory of every member of the Tech Club of New Hampshire fortunate enough to have accepted the hos-

pitality of their president, E. W. Rollins, '71, who again provided a clam bake and entertainment for the Ninth Annual Outing of the Club at his beautiful summer home, "Three Rivers Farm," Dover, N. H.

Gathered there was a collection of celebrities such as one would go far to equal; but as a collector our president is unsurpassed. Most men are intent solely on collecting money. Our president, however, diversifies his energies, men also forming a part of his collecting hobby. So to him we owed the pleasure of having with us President Maclaurin of M. I. T.; Prof. R. H. Richards of '68, (the oldest class represented); I. W. Litchfield, '85, just returned from war work; Charles T. Main, '76, the eminent mill engineer; Hugh K. Moore, '97, one of the country's foremost chemists; N. S. Bean, Vice-President of Tech Club of New Hampshire; J. W. Rollins, '78, member of an internationally famous engineering concern; R. H. Lord, '05, President of Tech Club of Maine; R. A. Hale, '77, and J. A. Collins, '97, officers of the Merrimack Valley Tech Association; George B. Lauder, '89, the Club's pet orator; Prof. F. W. Taylor of New Hampshire State College, Mayor Smalley of Dover and Benjamin W. Couch of Concord, N. H.

They were surely an imposing array, but collections to be of value must bring joy to others beside their collector. And here was where "Pres. E. W." demonstrated his discrimination as a collector, for each individual of the collection brought joy to our affair.

We had the unique privilege of being the first, of Tech Alumni, to learn from President Maclaurin that the identity of the "mysterious Mr. Smith" would be divulged January 1, 1920.

There's where our collector produced the gem of our Club collection. We own the honor of possessing the first knowledge of the time set for "Mr. Smith" to reveal his identity. Does that not stimulate pride in our president and also give one joy forever to have the ownership of such a treasure. Not that we want to gloat over its possession, but because we want it recorded that perhaps here originated the idea for the great Alumni Endowment Fund.

Following President Maclaurin came our good friend Ike Litchfield, whose absence for two years on war work left us tongue tied when it came time to spread the "oratorical caloric." It sure was good to take him by the hand and welcome him back. Probably no war worker gave of himself so unselfishly, so whole-heartedly and so sincerely as Ike. He was still in good form as to oratory and also produced a pleasing rhyme to our host as follows:

When the spring turns into summer,
When the old straw hats come out,
When a change to bevo-devos
Still is something of a doubt;
Suddenly a thought inspires you
To a grand ecstatic psalm,
For the glorious day is nearing
When we hike to Rollins Farm.

So we meet in hearty fashion,
Glorify old M. I. T.

Pour libations to our heroes—
To the gods of you and me;
But when filled with joy and clam juice
You're called up, as I today,
That's the time you're incoherent,
For you don't know what to say.

So a few bromide expressions |
Stalk along to play their part,
While the real thing dumbly nestles
In the cockles of your heart;
But I'd have our host remember
Always, everywhere he goes,
This is but a halting cypher
For the dearest wish he knows.

—*Ike.*

The New Hampshire members arrived at Three Rivers about eleven o'clock, were greeted by Pres. E. W. Rollins, '71, aided by a corps of lady assistants who helped in registering and tagging all arrivals after which a buffet lunch was served.

Later on a delegation from the Maine Tech Club arrived and a ball game was arranged between teams from the two clubs, resulting in a 15 to 2 score in favor of New Hampshire.

Following the ball game the assemblage repaired to the pine grove on the point, where two pretty streams join to make the third, which gives the name to the estate.

Here, at long tables laid under the trees and beneath a big American flag, was served a feast of food and oratory which held the attention of the grads until late in the afternoon, concluding a day so glorious that it was with heavy hearts we turned homeward realizing that a whole year separated us from another such event.

Each year we strive to express to our host some small part of the gratitude we have for his unbounding hospitality, for the privilege of letting loose a year's pent-up feelings and for our full enjoyment of the many delightful surprises he has stored up for us; but in the words of Ike, "that's the time you're incoherent" and we mutter "'s lovely day" and depart fully determined to live another year so as to be on deck for the next outing.

The ladies present were: Mrs. H. W. Briggs, Mrs. Gertrude N. Couch, Miss Marjorie Frary, Mrs. Elizabeth P. Goss, Mrs. Helen O. Hansen, Miss Grace P. Haskell, Miss Lina Meehan, Mrs. A. H. Swenson, Mrs. C. Ordway, Mrs. J. W. Rollins, Miss Sarah W. Rollins, Mrs. Sherwood Rollins, Mrs. A. Safford, Miss Elizabeth Sawyer, Miss Eleanor Seavey.

The men attending were: W. G. Abbott, Jr., '06, J. L. Arnott, '75, W. E. Ash, '15, H. E. Ayer, '17, R. E. Ayers, '09, L. G. Baer, F. W. Baker, '93, N. S. Bean, '94, G. O. Bennett, R. M. Blood, Dartmouth, '06, H. W. Briggs, J. Arthur Brown, '11, P. C. Brown, '08, F. A. Buckley, '03, M. L. Bullard, '08, C. E. Castleton, John C. Chase, '74, J. A. Collins, '97, Arthur J. Connor, '88, Ben W. Couch, Dartmouth, '96,

D. J. Coventry, Ernest Curley, '91, Walter Davol, '06, H. W. DeLong, '96, R. H. Durrell, T. W. Estabrook, '05, Andrew Fisher, Jr., '05, S. L. Flanders, '74, Arthur Foster, Frederick Foster, S. J. Foster, J. M. Fradd, William Goss, R. A. Hale, '77, S. L. Hanson, D. O. Hooper, '15, E. M. Hunt, '99, E. F. Kelley, '81, Louis Killion, '05, George B. Lauder, '89, I. W. Litchfield, '85, C. E. Locke, '96, R. H. Lord, '05, E. Lukmeister, '99, R. A. Machanis, Charles T. Main, '76, F. Oliver March, New York City, W. C. McKenzie, '14, Hugh K. Moore, '97, W. S. Newell, '99, W. H. Norris, '93, Donald Ordway, C. E. Paine, '93, S. S. Philbrook, '98, R. S. Pinkham, '06, S. C. Prescott, '94, Robert H. Richards, '68, E. W. Rollins, '71, J. W. Rollins, '78, Sherwood Rollins, E. W. Root, '98, H. Russell Sawyer, '99, Norman E. Seavey, '99, J. F. Sheppard, Cornell, '07, J. C. Sherman, '95, Fred Smalley, W. F. Smart, '05, H. A. Smith, '11, S. Smith, A. H. Stewart, '96, R. M. Sulloway, '17, Guy A. Swenson, '13, Omar S. Swenson, '03, F. W. Taylor, New Hampshire College, '00, R. E. Terry, '06, Bowen Torrey, Joseph Torrey, '80, S. W. Treat, '98, J. A. Warren, '91.—*Walter D. Davol, '06, Secretary, 819 Elm Street, Manchester, N. H.*

TECHNOLOGY CLUB OF THE MERRIMAC VALLEY.—The annual meeting of the Club was held on Wednesday evening, November 5, at the Yorick Club, Lowell.

Officers for the coming year were elected as follows: President, George F. Russell, '89, Lawrence; Vice-President, A. W. Thompson, '96, Lowell; Secretary-Treasurer, John A. Collins, Jr., '97, 67 Thorndyke Street, Lawrence; Member Executive Committee, William M. Perley, '98, Lowell; Representative Alumni Council, R. A. Hale, '77, Lawrence.

At seven o'clock thirty-seven sat down to dinner, President Barker presiding. The guests of the evening were Dr. John H. Lambert, '98, of Lowell, and I. W. Litchfield, '85, of Boston. Mr. Litchfield outlined the plans for the Fund Drive and made a plea for co-operation and support. Dr. Lambert was the speaker of the evening, taking as his subject, "A Tech Surgeon in France." He gave a very interesting account of his experiences and work while with the Expeditionary Forces and exhibited many photographs taken at the hospitals and dressing stations. The talk was greatly enjoyed by those present. *John A. Collins, Jr., Secretary, 67 Thorndyke Street, Lawrence, Mass.*

NEW ORLEANS—TECHNOLOGY CLUB OF THE SOUTH—The following Technology men, in attendance at the annual meeting of the American Public Health Association in New Orleans, met at lunch at the Chess, Checkers and Whist Club on October 28: C. E. A. Winslow, '98, J. L. Porter, '00, W. S. Resor, '93, Edwin O. Jordan, '88, Moise H. Goldstein, '04, C. E. Turner, '17, Dudley Ballinger, '13, Homer N. Calver, '14, H. M. Loomis, '97, E. L. P. Trenthardt, '09, P. G. Stiles, '97, James A. Tobey, '15, B. R. Rickards, '99, John H. O'Neill, '10, D. C. Stedsmith, '17, Lewis Davis, '12, George T. Palmer, '09, C. A. Abele, '17, A. W. Hedrich, '17, H. N. Parker, '94, John P. Labouisse, '94, Philip S. Platt, '14, George H. Shaw, '04, S. DeM. Gage, '96, Mayo Tolman, '13, S. C. Thompson, ex-'16, George W. Simons, Jr., '14, Vernon Robins, '17, H. W. Van Hovenberg, '11, C. C. Young, S. C. Prescott,

'94, Paul Hansen, '03, Hermann C. Lythgoe, '96, C. P. Moat, '96, Allison Owen, '93, E. S. Tisdale, '15, C. O. Emerson, Jr., '05.—*John H. O'Neill, '10, Secretary, Sanitary Engineer, Rapides Parish, Alexandria, La.*

PITTSBURGH ASSOCIATION M. I. T.—On Friday evening, October 24, the Pittsburgh Association held its first smoker of the year, and also of the last two years, at the University Club. A record attendance of fifty-two was recorded and it proved to be a great get together affair. A number of younger men have recently come to Pittsburgh and several were present at the smoker. Arthur R. Stubbs, '14, came out from Boston to the first shot in the Endowment Fund campaign among the local alumni. He gave a detailed outline of what was being done and what was expected of us and also conferred with the local committee. A sub-committee of the Regional Committee consisting of Luther K. Yoder, '95, Maurice R. Scharff, '09, and Harry A. Rapelye, '08, was appointed to take charge of canvassing the local alumni for their subscriptions.

On November 22, Messrs Yoder, Scharff, Rapelye and Foote went up to Youngstown, Ohio to launch the big drive in that city. They had an enthusiastic reception at a big turnout of the alumni there. Of a total of 20 men in Youngstown 16 were present at the dinner in the Hotel Ohio. This was due to the efforts of Lawrence H. Underwood, '03, who has been in charge of the campaign there.

A second smoker of the Association was held on December 17 at the Hotel Chatham with 35 in attendance. An election of officers for the year 1920 was held. Bradley Dewey, '09, of the Boston Committee was present and discussed the contract plan in detail. F. E. Daniels, '07, Assistant Engineer with the Pennsylvania State Department of Health, Harrisburgh, M. H. Mellish, '10, of the J. G. White Co. of New York, now at Latrobe, Pa., F. P. Karns, '14, of Franklin, Pa., and Bradley Dewey, '09, of Boston were the visiting alumni present.

The following men have recently visited Pittsburgh: Thomas E. Sears '03, Boston, C. Loring Hall, '15, Boston, F. P. Karns, '14, Franklin. The secretary hopes that any man passing through Pittsburgh will look him up and he will be glad to put them in touch with any of the Tech men in the city. Arrangements are now being made to have a regular monthly lunch and it is hoped that men coming to Pittsburgh will arrange to get there on that day. The definite dope will be announced in a later issue of the REVIEW.

Officers of the Association for 1920: President, Edmund D. Barry, '95, Universal Portland Cement Co., 524 Frick Building, Pittsburgh. Phone Court 2413. Unity 8. 335 S. Highland Avenue, Pittsburgh, Pa. Phone Hiland 4968. Vice-President, Maurice R. Scharff, '09, 1200 Jones Building. Phone, Court 4360. 409 Denniston Avenue, Pittsburgh, Pa. Phone Hiland 8606. Secretary-Treasurer, Francis C. Foote, '16, 1200 Jones Building. Phone Court 4360. 227 Thorn Street, Sewickley, Pa. Phone Sewickley 447-J. Alumni Council, Representative Bradley Dewey, '09, Dewey & Almy Chemical Co., Harvey Street, North Cambridge, Mass. Executive Committee, the President, the Vice-President, the Secretary-Treasurer. G. M. Gadsby, '09, West Penn. Power Co., Benedum Trees Building. Phone

Court 4106J. 2212 Shady Avenue, Pittsburgh, Pa. Phone Hazel 1959-J. Arthur G. Pierce, '92, Cutler Hammer Manufacturing Co., 20003 Farmers Bank Building. Phone Grant 1085. 394 Center Street, Pittsburgh, Pa. Phone Franklin 688-J. R. E. Zimmerman, '11, American Sheet & Tin Plate Co., 210 Semple Street, Pittsburgh. Phone Schenley 3110. 7135 Meade Street, Pittsburgh, Pa. Hiland 2433.

As to the part which the Pittsburgh alumni have taken in the big drive we will let the official figures published elsewhere in this issue tell their story. At the present writing over a 50 per cent response has been made. The secretary feels that this drive has been a great asset in finding out who is and who is not around. It has resulted in finding a lot of men whom he was never able to locate. Also some have moved away without giving due notification. The result is that we now have a line on all the men located in Pittsburgh. — *F. P. Foote, Secretary-Treasurer, 1200 Jones Building, Pittsburgh, Pa.*

PROVIDENCE—TECHNOLOGY CLUB OF RHODE ISLAND.—The members of the Technology Club of Rhode Island were the guests of the president, Frank L. Pierce, '89, at the annual meeting, which was held at the Providence Art Club on Thursday evening, November 20, 1919, with the largest attendance in the history of the organization.

Mr. George C. Gibbs, '00, recently returned from the Technology Bureau in Paris, was the principal speaker and related his experiences overseas and described the work accomplished for Technology and other college men in France, concluding with a reference to the drive for the endowment fund, and the needs of the Institute.

Later a club supper was served and a social hour enabled many of the new members to get acquainted. The following officers were unanimously re-elected: President, Thayer P. Gates, '02; Vice-President, Roland H. Ballou, '04, Secretary-Treasurer, Howard C. Fisher, '09; Executive Committee, Chester C. Morey, '11 and Clarence L. Hussey, '08.—*Clarence L. Hussey, Retiring Secretary-Treasurer, 100 High Service Avenue, Providence, R. I.*

ROCHESTER—THE TECHNOLOGY CLUB OF ROCHESTER.—The Annual Meeting of the Rochester Technology Club was held on November 10, 1919. Twenty-two were present at the dinner which preceded the meeting. The following were elected officers for the ensuing year: President, J. H. Haste, First Vice-President, F. L. Higgins, Second Vice-President, W. C. Cross, Secretary-Treasurer, H. H. Tozier, Member Executive Committee, 3 years, F. G. Saegmueller.

Outside of the election of officers the chief matter of interest was the Tech Drive. The response from the local alumni has been very gratifying, 40 of the 48 alumni have subscribed \$38,000, or 83 1-3 per cent subscription.

Dr. F. A. Norris spent a couple of days in Rochester the early part part of November. He was the guest of Dr. W. F. Zimmerli, president of the local section of the American Chemical Society, who was at Heidelberg at the same time Dr. Norris was. He was the guest at an informal dinner of the Section held in the University of Rochester mess hall. It proved to be quite a reunion of the Tech men in the city.

Dr. Norris gave a very interesting talk to the Chemical Society on his experiences while in England and France as American representative to the Allied Gas Warfare Council. Whether from modesty or for other reasons, he told very little of the great work done and the progress made by this country in Gas Warfare in which he played a very important part, but his audience enjoyed every minute, and the largest lecture room of the University was filled to capacity.

Among those present was C. H. H. Stone, '96, much to the surprise of his former classmates who were not aware that he was in the city. His only excuse for not making his presence known long before was that he had been so busy making good gas for the Rochester Railway & Light Co., that he had had no opportunity to do so.

The many friends of F. A. Cole, '91, were greatly shocked to learn of the sudden death of his wife, who was found dead in her electric on Monday, December 15. She had driven her car up to the curb of a side street just off Main Street in the downtown section, and had succumbed to an attack of heart failure.—*H. H. Tozier, Secretary-Treasurer, 26 Jones Avenue, Rochester, N. Y.*

SEATTLE—TECHNOLOGY CLUB OF PUGET SOUND.—At a luncheon meeting of the Technology Club of Puget Sound, Seattle, Wash., on Monday, November 24, the following officers of the club: Mr. W. Scott Matheson, '99, President; Mr. Houghton H. Whithed, '11, Secretary-Treasurer were replaced by Mr. Charles A. Merriam, '06, President; Mr. Russell H. White, '16, Secretary-Treasurer.—*Russell H. White, 3329 East Madison Avenue, Seattle, Wash.*

SYRACUSE—M. I. T. CLUB OF CENTRAL NEW YORK.—About the only news of the Central New York M. I. T. Club is that we have been working hard on the Endowment Fund and we are glad to report that every one of the fifty-two members has subscribed something, totaling \$12,242. In fact, we have been so busy that we have had only one meeting and that was held the last of September, all the work being done by personal solicitation. We are ready, however, to hold a rousing good meeting the first of the year.—*J. S. Barnes, Secretary, Merrell-Soule Co., Syracuse, N. Y.*

NEWS FROM THE CLASSES

1868

ROBERT H. RICHARDS, *Secretary*, 32 Eliot Street, Jamaica Plain, Massachusetts

We lament the death of John Mason Little and of Ellery C. Appleton. Fuller detail will be given in the April issue.

Mr. Whitney Conant has been very sick indeed but is now steadily improving and we hope will be restored to health.

Mr. Nathaniel Walker Appleton has had two attacks, one from neuralgia of the heart and a later one a severe attack of neuralgia. They have left him in a condition so that he was not able to attend the banquet January 10, which we all regretted very much.

1873

SAMUEL E. TINKHAM, *Secretary*, The Warren, Roxbury, Mass.

General Pershing has made it perfectly plain that, next to the men on the firing line the transportation service did more to win the war than any other, and no one man did more to bring about the wonderful results accomplished by the transportation service than did Felton of '73, as Director General of Military Railways, and for which he received a Distinguished Service Medal.

From a personal letter of Secretary of War Baker, to Felton, accepting his resignation, the following extract is made, indicating how his work is appreciated.

"The signing of the armistice has brought about a situation in which the War Department can no longer rightfully detain from their civilian occupations men who like you have laid down great personal responsibility and forfeited great personal opportunities in order to serve the Government. I, therefore, have no choice but to accept your resignation, both in justice to you and to your work. I do so, however, with a feeling that I cannot find expressions adequate to convey either my admiration of the spirit and quality of your work, or my gratitude for the devotion and self-sacrifice with which you have bent every energy to the successful prosecution of the various undertakings which fell to you as Director General of Military Railways. Certainly no civilian who came to Washington in the emergency contributed more to the successful mobilization of our resources, and I hope that some adequate way will appear to make the extent and character of these services publicly known. In the meantime, work of such quality, done in such spirit, must contain in large part its own reward."

1874

CHARLES F. READ, *Secretary*, Old State House, Boston, Mass.

No report received from the secretary.

William S. Whitney, who lost his life in a Boston fire December 18, was for many years consulting engineer of the American Woolen Company.

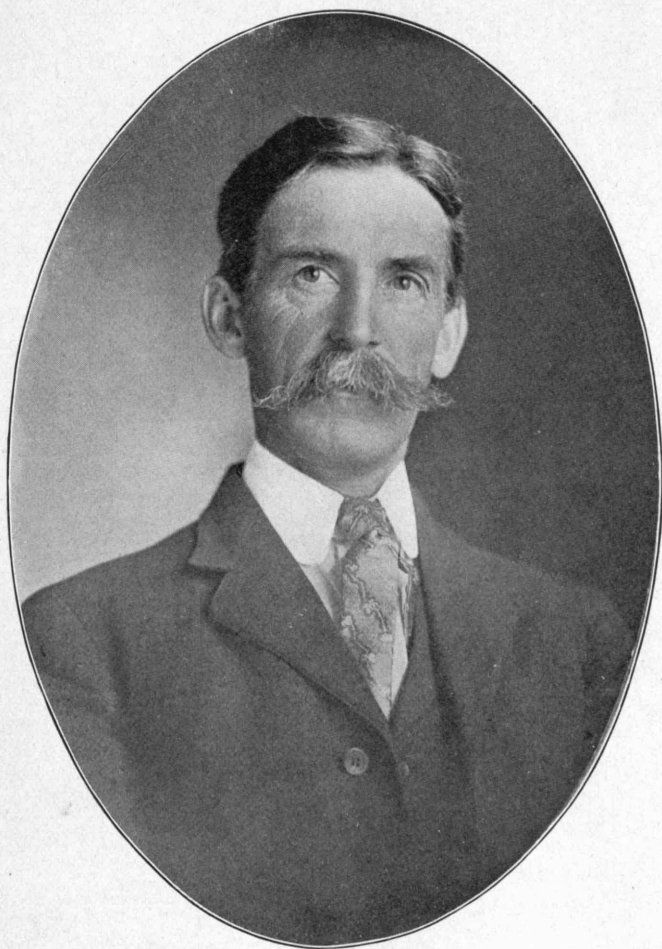
Mr. Whitney was born in Beverly, and he attended the Massachusetts Institute of Technology. He first entered mill work in Fall River in a minor position and came to Lawrence about 25 years ago, first having supervision of mechanical work in the Washington Mills.

He rose rapidly and when the American Woolen Company was formed he was made consulting engineer of the company. Besides his wife, he leaves a son. Lawrence Whitney of Pittsfield, Mass.

1875

E. A. W. HAMMATT, *Secretary*, South Orleans, Mass.

When the campaign for the Technology Educational Endowment Fund started, your secretary quickly realized that it would be absolutely impossible for him to keep



EDMUND GROVER, '77

closely enough in touch with the various committees, etc., for him to do effective work personally, so he called upon our ever ready class president to act as chairman of the class committee, and you all realize that he was on his job. I note that '75 is credited with having a membership of eighty-one men whose addresses are known; but, as you know, some of these were also connected with other classes. Now as subscribers to the fund '75 gets credit for 15, or about 18 per cent of its membership. But I find as subscribers credited to other classes at least ten men or more who are numbered among the eighty-one members of the class; so that if on the lists we have eighty-one members, we should be credited with at least twenty-five subscribers — or 30 per cent.

Of course all correspondence has been with President Hibbard, and he has placed at my disposal a few extracts from some of the letters.

Bill Eccles says under date of December 3, — "I had expected to be in Washington long before this, but have been held here (San Francisco) by illness. . . . Am feeling better and hope to get out soon."

Burnet (Mose) writes from Orient, Ill., "Because I have not promptly answered your very kind and friendly letter, do not imagine that I did not appreciate it. Just as soon as this strike is over and I am not so pressed for personal time I shall give myself the pleasure of talking to you on paper."

Frank Dabney says, "I was glad to hear from you and very sorry I could not have seen you when I was in Boston. I was much hurried, and could not see half the people I wished to. . . . Dean Burton is here, and I have been out with him most of the day seeing Tech men and others. We were fairly successful, no large subscriptions, but the important thing is to get names. We should have 50 per cent of the alumni sign up for something, and I hope '75 will show up well."

Wilfred Lewis writes, "My plant (Taber Manufacturing Company) was burned October 30, when business was booming at an unprecedented rate, and I am now struggling with the problems that come out of its ashes. Fortunately I had just bought a new place a month before, and have been moving what remains into our new quarters at Lacony. The fire speeded up my program very much, and although pretty well insured, the loss will be heavy, and especially in delayed production."

Ben Oxnard writes, "While it is more than forty-four years since I have seen you or even communicated with you, you were one of the men in our class that I have often thought of and hoped to meet some time. . . . I saw Sam Mixter a few years ago when he was in New Orleans, but otherwise I think it is fully twenty-five or thirty years since I have seen any other classmate. When you see the other members please give them my affectionate regards."

Ben may have forgotten it, but your secretary will not soon forget the pleasant hour we spent together in New Orleans about ten years ago, when I was on my way back, from a two months' trip in the wilds of Mexico.

The news of the death of Frederick E. Okie on May 11, 1916 and of Norman S. Patton on March 15, 1915 has only recently been received.

1877

R. A. HALE, *Secretary*, Essex Company, Lawrence, Mass.

Edmund Grover, son of the late David F. and Ann M. (Lewis) Grover, died at his home in East Walpole, Sunday evening, October 19, after an illness of several months.

Mr. Grover was educated in the public schools of Walpole and the Massachusetts Institute of Technology, graduating from the latter institution in the Class of 1877, with the degree of S. B. For two years immediately following graduation he was associated with his father in paper making.

He married in 1883 Isabelle Jondro of Milford, New Hampshire. They had three children — E. Stanley, a civil engineer with the American Steel and Wire Company, Worcester, Mass.; Arnold F., director of manual training in the Walpole Public Schools and Shirley I., wife of Frederick V. Bell of East Walpole.

He was employed as a civil engineer for a number of years, before and after marriage, on railroads in the West. Among the companies with which he was connected were the Chicago, Burlington and Quincy, and Atchison, Topeka and Santa Fe. Before taking up his permanent residence in Walpole, he had followed his profession in Illinois, Ohio, Indiana, Kansas, Colorado, Arizona, New Mexico, Kentucky, Virginia, Missouri, and North Carolina.

In Walpole and vicinity he has practiced landscape gardening and civil engineering

since 1891. For a time he was in the office of Olmstead, Olmstead & Eliot, Landscape Architects.

His interests were many sided as is shown by membership in the Boston Society of Civil Engineers, Massachusetts Forestry Association and State and local Granges.

As a citizen he was deeply interested in our public schools and for six years was a member of the School Committee. It is but simple justice to say that few men have served on school boards who had more intelligent and more progressive views regarding the needs of public education.

It was a great satisfaction to him that one of his children became a teacher.

Mr. Grover was a consistent advocate of adequate wages for good teachers, long before the present days of high prices, when educators are leaving the profession in order to make a living wage. He believed in justice rather than expediency.

He was a lover of the best in literature, particularly of the works of Burroughs and Ruskin. The English author H. G. Wells made a strong appeal to his sense of social justice.

In national politics he was inclined to take the democratic point of view; but he was never hide bound in his attitude. He voted independently and conscientiously. For years he had taken the Congressional Record, the official report of our National Legislature. Few men knew better than he what our statesmen were thinking and doing.

For nearly sixty-five years this modest and unassuming citizen has shown by his plain living, high thinking and purity of life and conduct that it is still possible in an age of materialism to live in the realm of the spirit. He fought the good fight and he kept his faith. The ideals that were his in the morning of life were his at life's close. Amid successes, reverses, and disappointments he pursued the even tenor of his way. May his widow, his children, his sister and his friends find peace and happiness in the reflections consequent upon a life so well spent.

C. F. Laughton writes about Grover:

"Tom" he was to me, because while at the Institute one of my closest friends, and we corresponded rather intermittently up to shortly before his going away. He was always a lover of the out-door life. The fields and the woods attracted him and he was a keen observer of nature. He had a memory for people and places that was remarkable and during his last illness in the few times I visited him, he loved to recall scenes and incidents of student days, and of the early '80's in New Mexico and Arizona where we both engaged on pioneer railroad work.

In later years after settling down in his old home town he became a great reader and thinker. He was a lover of good literature and had a wonderful memory for what he had read. He was also a deep thinker and had "long thoughts" of the betterment of mankind in both social and business relations.

His disposition was always quiet and unassuming, but at times extremely humorous. He was something of a poet. One of his last letters enclosed the following:

"SONNET — NOVEMBER

Each day the sun runs lower in the skies,
His rays more tangent strike the frosty ground.
The honking geese to milder lands are bound.
We watch them to the limit of our eyes,
The robin to his swamp of cedar flies,
And there in winter often may be found.
The blue-jay getting bold comes sailing round,
Then hastens off again with screaming cries,
And thus we know the summer days are gone,
And like the beasts of field and birds of air,
We seek a friendly roof and still wait on
Till days again are warm and skies are fair,
But while we wait we need not be forlorn;
Our minds for other days we shall prepare."

—Edmund Grover.

In the town where he was brought up, where he spent the greater part of his life, and where he was best known, he was loved and respected.

1879

FRANK G. STANTIAL, *Secretary*, Merrimac Chemical Company, Everett, Mass.

Frederic Henry Lane, Massachusetts Institute of Technology, '79, died at his house, 247 West 103d Street, New York City, Tuesday, November 11, 1919 of a heart trouble which may have been left by a severe attack of inflammatory rheumatism several years ago. He was born May 25, 1858 and brought up in the South End of Boston in the house of his father, Jonathan A. Lane, a well known Boston merchant, for years president of the Merchants' Association. Among his special playmates were Chandler W. Clifford and the musician, Arthur B. Whiting.

In the English High School of Boston he received a prize for declamation, but never seemed to have ambition as a public speaker. In the Tech his good eye and steady hand put him at the head in drawing. These same qualities were inherited by his son, Alfred Page Lane, who was the champion revolver shot of the world at Stockholm. It made him also excel in games like shooting and bowling, and may have been inherited from his father, as he used to relate with much gusto how to his great surprise his father beat him all out at bowling at a White Mountain hotel. He was also on the committee that selected the Tech colors.

Upon graduation he spent two years in various positions in the Georges River Mills (woolen) at Warren, Maine, getting the practical end of the woolen business. About 1882 he became superintendent of the Chambersburg (Pa.) woolen mills, leading the usual life of a superintendent of a small country mill. He used to tell how a boy tried to sell him the wool off a woolly dog, how he bought a pair of celluloid cuffs when they first came out and, not liking them, set fire to them, whereupon they burned so fiercely that he threw them in the alley and the town fire department was called out.

In 1885 he was employed by the Standard Oil Company in adapting their oils to the special uses of woolen mills and in introducing them, and at this time lived in Cleveland. This department was moved to New York, and he with it, and having established the desired connection with woolen mills, he was about to be sent to India, when his father thought he needed him more in the New York office of the Allen-Lane Company. Here he remained the rest of his life, becoming president of the corporation upon the death of his older brother in 1900.

He married at Macon, Ga., March 27, 1890, Louise Abbot Lane Moseley of Hernando, Miss., and had two sons, Alfred Page Lane, born September 26, 1891, the expert in arms with the Remington Arms Company, and Abbott Atwood Lane born February 16, 1893, a Yale graduate and instructor in Machine Design at the Sheffield Scientific School (and during the war captain in the United States Aviation Service). These survive him, and also two brothers, Benjamin C. Lane, Massachusetts Institute of Technology, '87, who was intimately associated with him in business, and Alfred C. Lane, professor of Geology at Tufts.

To the end of his life he was very fond of dancing, could play almost any instrument after a little trying, and enjoyed improvising at the piano. "His quiet humor and his absolute dependableness as a good companion made him much sought after" in a social way, and he was class president at the twenty-fifth anniversary. But he never sought fame or popularity and was essentially a family man.

His fondness for music made him very active and useful in the Young People's Society of the Union Church of Boston of which he was a member, and after coming to New York he helped Mr. Silas H. Paine in the Bethany S. S. until the cares of a young family interfered.

1881

FRANK E. CAME, *Secretary*, 17 Metcalf Apartments, Westmount, Montreal, P. Q.

Major Briggs has been elected temporary president and chairman of the Tech Varsity Club for "T" men.

1882

WALTER B. SNOW, *Secretary*, 136 Federal Street, Boston, Mass.

A dinner for the discussion of the Endowment Fund was held at the Boston City Club, December 5, with Darrow, French, Gooding, Herrick, Walker, and Snow in attendance.

James P. Munroe was initiated on December 3 as an honorary member of Phi Beta Kappa at the old college of William and Mary where this senior of all the Greek letter societies was founded. It was manifestly a special honor to have been admitted to this chapter, which has always met at William and Mary on the night of December 5, except for the brief interruption of the Revolutionary and the Civil wars, and where they use the ritual instituted by the students who founded Phi Beta Kappa on that date in 1776. Munroe is nowadays trying to work on the decimal system in the endeavor to divide himself into about ten pieces in order that he may be in that number of places at the same time. The Federal Board for Vocational Education, of which he is Vice-Chairman, now has close upon 20,000 disabled men actually in training and has made all of the arrangements for more than 10,000 additional. He writes that it looks now as though they would in the end go far beyond the 50,000 mark which a few weeks ago they set for themselves. The work of the Board with the States is progressing far faster than they anticipated, and there seems every reason to believe that within a short time Congress will pass a bill extending training to the disabled in industry and making the Board responsible. For the next fiscal year the Board has asked for about \$38,000,000. As these large sums are distributed all over the United States, it is manifest that a pretty elaborate organization both educational and business must be maintained. Munroe is finding all of this most absorbingly interesting.

After a long period of silence Snelling has been heard from again. For twenty months he was abroad, having gone over to Paris on a purely commercial errand and having been there throughout the bombardment by the big Bertha and the night air raids by the "Gothas." He writes that he worked very hard, finally broke down completely, and was obliged to go down to Italy to join his sister, whose home is in Florence. There he stayed for some six months and then came back to New York to try to get back into the architectural harness. Owing to the condition of his health he is fearful to stand the strain of active business again. We shall certainly hope to see him at the next dinner, and by all means at the reunion next year.

Fred E. Hill, who was for some time associated with the class in the special course in architecture, was recently heard from. Some time ago he gave up his architectural practice and entered the service of the government, at present being one of the force of auditors employed by the United States Housing Corporation. His present address is 2801 Fourth Street, N. E., Washington, D. C.

1884

HARRY W. TYLER, *Secretary*, Massachusetts Institute of Technology, Cambridge, Mass.

Members of the class of '84 will be much interested to learn of the marriage of Mrs. Rotch to Mr. Henry Parkman, Jr.

Ambassador Bonillas has been mentioned in the press of late as a possible successor to President Carranza. (e. g. New York "Times" of November 23).

The secretary is indebted to Bonillas for the "Mexican Review" and other publications indicating how little dependence can be placed on foreign newspaper reports of Mexican conditions. These reports seem to be too frequently inspired by hostility to the Wilson administration and by motives of a still less reputable character on the part of people interested in Mexico for purposes of exploitation.

Mr. and Mrs. Ralph L. Flanders of 737 Washington Street, Brookline, announce the engagement of their daughter, Evelyn, to Snelling Slater Robinson, son of Mr. and Mrs. Charles Snelling Robinson of Youngstown, Ohio.

At the Alumni Dinner of January 10, duPont presided, and the following members of the class were present: Appleton, Bridgman, Coburn, Fitch, Gill, Lull, Puffer, Stuart, Tyler and Mrs. Tyler.

1885

I. W. LITCHFIELD, *Secretary*, 28 Austin Street, Newtonville, Mass.

Reddington Fiske, as Belgian consul in Boston, represented the class of '85 in doing the high honors to King Albert of Belgium when he was entertained by the municipality

of Boston. Consul Fiske wore his honors thick upon him and did himself and the class proud. The King pinned a medal on Fiske and then Fiske pinned medals on a lot of the other folks. It is needless to say that their Majesties of Belgium were most delighted with the courtesies extended by the City of Boston through the Belgian consul. Fiske was knighted some time ago and we will have to be doubly respectful in the future. He is one of many in the class who have given a large part of their time to public matters. For many years he was one of the most active members of the Charity Organization Society of Boston, and has been identified with many other good causes.

The rumor that was spread at the last class dinner to the effect that the class tree had pined away and died in its new environment in Cambridge, is alas too true. The soil around the new buildings does not seem to be the kind that trees like to grow in. There ought to be engineering ability enough in the class to find a way to make a tree grow anywhere, and it is suggested that a tree committee be appointed to make an extensive research into this matter and report with recommendations. The class of '85 has not been the same since it lost its tree, but with a young healthy shoot dedicated to its success and progress it will again bud and blossom.

Word has only recently been received by the secretary that Lan Kellog died some months ago. Kellog was with the class during its first year at the Institute and made a great many friends. He afterwards went to Yale and later married and took up his residence in San Francisco. The secretary has not heard from him for several years.

Nat Robertson is in luxurious retirement in somnolent Pennsylvania, where he sews quilts and smokes his Henry Clay pipe while the Swede down at the forge makes shovels for him. These shovels of Nat's did a lot of work for Uncle Sam during the war and were important elements in the undermining of the Kaiser's government. As class president Nat is putting in most of his time this winter making arrangements for the big thirty-fifth reunion of the class next summer.

Owing to the new and onerous responsibilities that have been thrust upon him, Dick Pearce has been unable to see his business through on the golf links during the winter. As spirituous adviser and custodian of the contents of the "Boozorium" which the preparedness committee secured in advance of the long draught, Dick is constantly on guard, grim, alert and suspicious both of foes within and foes without. He has thus far developed strong powers of resistance.

Eminent engineers from different parts of the country attended the annual installation of officers of the Boston chapter of the American Association of Engineers in Tremont Temple, November 17, 1919. Dr. Frederick Haynes Newell, president of the national association and head of the civil engineering department of the University of Illinois, delivered the principal address.

Dr. Newell was graduated from the Massachusetts Institute of Technology in the class of '85, and after field experience in Colorado and other western states, was appointed assistant hydraulic engineer of the United States Geological Survey. He also assisted in the preparation and public presentation of various congressional bills, one of which, by the personal efforts of President Roosevelt, became the Reclamation Act when signed on June 17, 1902. Immediately after that, Dr. Newell was appointed chief engineer under Charles D. Walcott, then director of the United States Geological Survey.

Ev Morss has been working hard as class representative on the Endowment Fund Committee, and on December 18, had secured \$40,380.00 from twenty-five members of the class. The amount is creditable, although there are eight classes giving larger amounts. The number of subscribers, however, is altogether too small; we ought to get at least sixty per cent of our members, even if the amounts are merely nominal. The Fund will remain open for a reasonable time, although it is hoped that by the time this reaches the class the figures will be tremendously improved. The Fund has received a subscription from Mrs. William J. Mullins who sent \$1,000.00 in memory of her husband.

1889

WALTER H. KILHAM, *Secretary*, 9 Park Street, Boston, Mass.

Hollis French is very busy on a terminal and topping plant for the New England Oil Company at Bedford, complete with docks, etc., and another and still larger one at Fall River, Mass. Also a cracking plant at Shreveport, La., and several other important operations.

Owing to the secretary's absence in Mexico City during a portion of the fall it was impossible to collect the usual number of important news items from members of the class.

1890

GEORGE L. GILMORE, *Secretary*, Lexington, Mass.

In a report made in October by the Finance Committee of Boston, in which it was reported that the service of the city inspectors on paving work had been negligent, dishonest, or both, Consulting Engineer G. C. Emerson of the Commission, who compiled the original report, stated that on the Roxbury job, asphalt and binder were mixed during a rain storm, which would seriously affect the durability of the paving.

Darragh de Lancey, who is on the Marine and Dock Industrial Relations Division of the United States Shipping Board in Washington, has recently been given charge of all the Industrial Relations, including Ship Construction, and is now director of the Division of Industrial Relations, which in future in order to co-ordinate its labor policy, all questions of labor policy affecting the construction, repair, operation, loading, and unloading of ships and marine equipment will hereafter be handled, subject to direction of the Board.

Otis Daniell of Tilton, N. H., and Warren F. Daniell of Franklin, N. H., with their two brothers, have recently given the home of their late father to the town of Franklin, N. H., as a home for a social center for the workers and employees of the city and their families. The estate is estimated to be worth about fifty thousand dollars.

As a result of the National Trade Conference held at Atlantic City in October, a National Committee of Finance was appointed, of which Charles Hayden is a member.

Hayden has also been made a director of the Granbry Mining, Smelting, and Power Company.

Mr. and Mrs. J. L. Batchelder, with their son, are to spend the winter at Bermuda.

The New York *Times* of November 9 had a full-page reproduction of the photograph of the moon taken by Dr. George E. Hale with the new one-hundred-inch Hooker telescope, at Mt. Wilson, Cal.

The death is reported of Charles B. Pitman, on October 9.

Miss Elinor Nimms, daughter of our classmate Norman G. Nimms, of Yonkers, N. Y., graduated last June from Vassar College. How many more of our members can regard themselves as fathers of Sweet-Girl-Graduates?

Our thirtieth anniversary reunion will occur in June. The big alumni reunion is to take place on Friday and Saturday, June 10 and 11; and the plan now is that our reunion will occur the three days previous, so put it down on your list and keep it before you and make your plans to be in Boston at that time. Further particulars will follow later.

We regret to report the death of William I. Finch of our class. Finch was only with us the freshman year but will probably be remembered as one of the active members of the Society of Ninety. At the time of his death he was living in Berkeley, Cal.

A fire December 16 at Toledo, Ohio, in the works of the Milburn Wagon Company, destroyed one wing of the plant with a loss of nine hundred thousand dollars. Several hundred automobile bodies and about twenty electric autos were lost. Fred H. Dodge is one of the officers of this company.

1891

HENRY A. FISKE, *Secretary*, Care General Fire Extinguisher Company,
275 West Exchange Building, Providence, R. I.

Pressure of work in connection with the Endowment Fund has prevented much activity in getting news from class members.

A recent number of the "Literary Digest" has an article entitled "Texas as the Home of Helium." One of the photographs shows Fred E. Norton, who is easier recognized by his height than by the excellence of the photograph. The following is taken from the "Literary Digest."

"Texas is the home of helium. The Government has already planned to spend \$6,000,000 in producing it.

"There were two production plants in Fort Worth, located on the North Side, during the last year and a half. They were guarded by soldiers and no outsider ever viewed the making of helium. The gas obtained there was loaded in cylinders and a great quantity was ready on the docks in New Orleans for shipment to France when the armistice was signed. Had helium reached the American Expeditionary Forces a most wonderful chapter would have been written into the war.

"The eyes of the scientific world are turned now on two points in Texas. One is

Fort Worth; the other is Petrolia. The two production plants here have been dismantled. A new plant is being built, and inside of a few months at the most helium will be produced in quantities. The plant is being built by the Linde Company, which, with the Air-Reduction Company, operated the two earlier plants. The Linde process is still maintained a secret. It will be operated by and for the United States Navy and under the direct supervision of Commander H. N. Jenson, United States Navy.

"The Petrolia plant is in the last experimental stages. The Jefferies-Norton process is used. It is the result of the combined efforts of E. A. W. Jefferies, an Englishman, who came to this country thirty-seven years ago, and Fred E. Norton, graduate of Massachusetts Institute of Technology, former engineer of the General Electric Company. Norton and Jefferies combined interests a year ago and the result of their patented process has been turned over to the Government."

Incidentally, this reminds the secretary of an event in undergraduate days,— namely, a cross country bicycle race, and the picture is still clear of Fred Norton coming down the home stretch in the lead, astride the tallest, old-style, high-wheel bicycle that ever came out of captivity. He was some sight.

A letter from Clarence Whitney shows that his activities increase rather than diminish as time goes on. He is giving much time to important industrial problems in connection with the relations of the employer to the employee. He is chairman of a State Wide Campaign for Connecticut's Unfortunate and Cripple Children. He has organized a new company, known as the Hanson Whitney Machine Company, with a new building now in process. He is president of a new hotel company for the benefit of Hartford, also president of a company which has secured a large tract of land and is considering a housing proposition for employees.

If any other '91 man has a larger number of outside duties in hand, let him come forward and show himself.

Howard Forbes is now located in New York as secretary of the American Welding Society, with headquarters at 33 West Thirty-Ninth Street. This Society has recently issued the first number of a journal which is to be the official organ of the American Bureau of Welding. Many prominent engineering societies are represented in this bureau. The movement towards the scientific advancement of welding was started by the Emergency Fleet Corporation. This work was necessarily dropped by the Government, and is now in the hands of the American Welding Society. Those interested in this subject can presumably secure copies of the journal by writing Forbes at the above address.

1892

GEORGE H. INGRAM, *Secretary*, 2052 Cornell Road, Cleveland, Ohio

C. H. CHASE, *Assistant Secretary*, Tufts College, Massachusetts

No report received from the secretary.

Miss Frances A. Griffin, a Boston school teacher, and William Coolidge Thalheimer, a graduate of Massachusetts Institute of Technology, now a consulting engineer, were married December 4, 1919, at the home of the bride's brother, John T. Griffin. The double ring service was performed by Rev. John B. Carruthers, pastor of the Congregational Church. After a short honeymoon Mr. and Mrs. Thalheimer will return to Freeport to reside.

Mrs. Margaret Ryerson Smith, of 1234 Commonwealth Avenue, Brookline, announces the engagement of her daughter Louise Bailey, to Mr. Edward Castle Wells, II, of New York City.

1895

WALLACE C. BRACKETT, *Secretary*, 105 Washington Street, Boston, Mass.

The record of the class subscription to the Technology Endowment Fund stands as follows at this date (December 16, 1919).

Total amount subscribed approximately \$30,000. Number of subscribers, 59. Of this amount \$20,000 was given by 10 men. The mailing list of the class at present is 268; the number of givers is not as great as it should be, but perhaps between now and January 1, 1920, the number may be increased.

The number of men who have subscribed and contributed to the Twenty-Fifth Anniversary Class Book is 86, and enough has been received and pledged so we know we

will have a book, and a good one. Eighty-six out of two hundred and sixty-eight is a small percentage to hear from and the Committee cannot believe that it is indifference that prevents the balance from answering. Won't every '95 man who reads this please send in his card to the secretary, if he has not already done so?

Be sure to make out your questionnaire and send to Booth at once; if you think it a job to make this out, what do you think of the job he has tabulating and editing them? If the questionnaires already received are a fair example of what are to come, they will certainly make interesting reading.

Don't forget the prizes, send in your poems, stories, songs, etc., at once and be sure to send the "before" and "after" photographs. Help the Committee by doing it now.

Louis Rourke has resigned his position with the Chili Exploration Company, and has returned to Boston. He is at the Hotel Bellevue for the winter.

Lawrence Barr was in Boston recently on his way to Pinehurst for several months. He still lives in Pittsburgh, but is connected with a concern making knit goods in Elyria, Ohio.

A note from Clarence Goldsmith states that he is now connected with the National Board of Fire Underwriters, at 76 Williams Street, New York City.

Wray, of Henry Wray & Son, Inc., and the National Brass Mfg. Co. of Rochester, N. Y., writes that his companies were engaged during the war in making parts for various plants manufacturing munitions. Some of the items made were acetylene welding rods, special valves and lubricators.

Herbert E. Davis writes that his firm is very busy, and we take this to mean that many new buildings are being designed by them. Davis is a partner in the firm of Davis, McGrath & Kessling of New York City.

Major Meserve is located at Fortress Monroe at present, but is anxious to get back to Arizona and his professional work.

Clergue is a consulting engineer with offices at 137 McGill Street, Montreal, Canada.

'95 men are certainly some travelers. Wiggin is in China, Bill Swift is in Greece, Rickey is in Scotland, and Swope and Park are reputed to be abroad, but no specific place named.

Recent addresses sent to the secretary are as follows: De Nise Burkhalter, Indiana Creosoting Co., Box 34, Bloomington, Illinois; Harold C. Buckminster, 6 Beacon Street, Boston; Joseph W. Cushing, 520 Williams Street, East Orange, N. J.; W. E. Goodyear, 42 Church Street, New Haven, Conn.; Frank B. Masters, 121 East 23d Street, New York City; Ira A. Nay, Jr., 162 Boylston Street, Boston, Mass.; W. P. Robins, Department of Architecture, University of Pennsylvania, Philadelphia, Penn.; Frank C. Schmitz, 1133 Broadway, New York City; Harry J. Sheafe, Chemical Engineer, Bureau of Mines, Saratoga, Calif.; Frank S. V. Sias, care Henry Cole & Co., 54 Old Colony Avenue, South Boston, Mass.; Alfred V. Shaw, 6212 25th Avenue, S. E., Portland, Oregon; Edward A. Tucker, 101 Milk Street, Boston, Mass.

You will note in another part of this issue a statement relating to the All Technology Reunion in June, 1920. Be sure to start in to plan for this and remember that '95 twenty-fifth anniversary comes at the same time, that we are going to have the biggest and best outing that '95 ever had, and that you are going to be there.

More information regarding detail of the outing will be sent out later by the committee, meantime let each man constitute himself a committee of one to boost this reunion in every possible way.

If you did not receive your questionnaire or the special notices relating to the Twenty-Fifth Anniversary Class Book, notify the secretary at once, and he will send you copies.

Karl Harbaugh writes that Fred Marvin whom many will remember in the first year is a prosperous steamship operator in Tacoma, Washington.

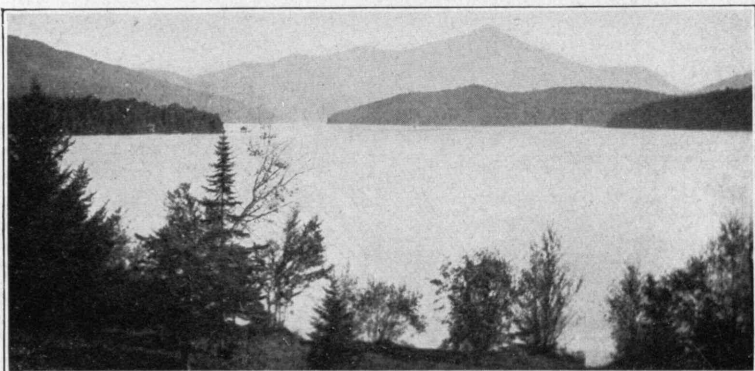
E. F. Badger writes that he expects to finish his work at the Milwaukee Experimental Station about February first.

F. E. Matthes writes that he spent the summer in the Yosemite National Park lecturing on the origin of the national wonders to all who wanted to hear him and also found out some new facts that will be worth relating at the reunion next year. It is his seventh visit to Yosemite and he says he is beginning to be classed among the old inhabitants.

Walter J. Rickey writes that he went to Scotland six and one half years ago and has been back to the United States but once, that being a short business trip last January. He further states, "Had it not been for the war I should of course have been back more frequently, but on account of the difficulties of travel and the fact that we were busy here in all kinds of munition manufacture it was not possible to get home." Rickey is with the Singer Manufacturing Company, at Clydebank, Scotland.



1889 REUNION
June, 1919



REUNION, CLASSES OF 1898-99
June, 1919

1896

CHARLES E. LOCKE, *Secretary*, Massachusetts Institute of Technology, Cambridge, Mass.

J. ARNOLD ROCKWELL, *Assistant Secretary*, 24 Garden Street, Cambridge, Mass.

The secretaries have been busy since October in connection with the Technology Endowment drive and most other matters which were not immediately pressing have gone by the board during that period. This applies not only to the secretaries but to Boston committee men as well. The pleasant feature of all this work, at least from the secretaries' viewpoint is that it gave a contact with a lot of the men who had not been heard from since they were at Technology nearly twenty-five years ago. It has also demonstrated that many '96 men who had not been heard from at all during that twenty-five year period have come forward to help the Institute and incidentally to help the class at this time and have shown thereby that they retained a spirit of loyalty to the Institute and to the class which increases rather than diminishes with time.

The chief difficulty met with in this campaign was the difficulty in getting in personal touch with men in isolated districts. Men in large centers could be reached readily, seen personally, with generally prompt response. An isolated man at a distance could be approached only by mail and this method proved unsatisfactory.

NEW ADDRESSES

A number of changes of addresses have been noted as follows: Mrs. Daniel D. Addison, Allen Street, Marion, Mass.; W. M. Andrew, Canadian Associated Manufacturers, electrical supplies, Room 206, 110 Church Street, Toronto, Ontario; F. M. Ashley, 1121 Baker Detwiler, Los Angeles, California; Colonel D. E. Aultman, Field Artillery, United States Army, General Staff College, Washington, D. C.; Henry D. Barto, Pompey, New York; Reverend Kinsley Blodgett, 17 Charlotte Street, Worcester, Massachusetts; Winthrop Coolidge, 417 Western Union Building, Chicago, Illinois; Mr. J. G. Callan, Eastern Manufacturing Company, Bangor, Maine; G. Clement Colburn, 31 Katherine Road, Watertown, Massachusetts; Captain C. I. Crocker, Room 1800, in charge municipal ferries, department plant and structures, New York City; Mrs. Helen C. Dodd, South Newbury, Vermont; Joseph Franklin, Jr., 214 Black Building, Fourth and Hill Streets, Los Angeles Calif.; Louis A. Freedman, Technology Sales Co., Inc., 27 Thames Street, New York City; Elizabeth V. Gaines, Saxe, Virginia; Henry Gardner, 605 Edgevale Road, Baltimore, Maryland; Major Robert S. Hardy, Assistant General Manager, Niagara, Lockport & Ontario Power Co., 1638 Marine Trust Building, Buffalo, New York; W. C. Haseltine, care A. L. Gage & Co., Rialto Building, San Francisco; C. H. Hurd, Crowley, Louisiana; Gaylord C. Hall, Interborough Rapid Transit Co., 600 West 59th Street, New York City; Arthur W. Hodges, 46 West Rosseter Street, Brockton, Massachusetts; Walter S. Leland, 208 Balboa Building, San Francisco, California; L. C. Marble, 1322 East 112th Street, Cleveland, Ohio; John E. Longren, care Whitaker-Glessner Co., Portsmouth, Ohio; Frank G. McCann, Room 2800 Municipal Building, New York, New York; Lieutenant Ernest E. Mead, 995 Market Street, San Francisco, California; Charles H. Morrill, Hyannis, Massachusetts; Reverend Guy L. Morrill, 156 Fifth Avenue, New York City; Herbert D. Newell, Klamath Falls, Oregon; Mrs. Alice P. Norton, Editor Journal Home Economics, 1211 Cathedral Street, Baltimore, Maryland; J. Porter Palmer, Atlantic Refining Co., New Haven, Connecticut; Francis R. Peabody, Firestone Rubber Co., Akron, Ohio; Harold A. Peckham, 142 Thames Street, Newport, Rhode Island; H. J. Poppenhausen, care Green Engineering Co., East Chicago, Indiana; Russell W. Porter, Jones & Lamson Machine Co., Springfield, Vermont; Frederick H. Pratt, Cohasset, Massachusetts; Edwin H. Roberts, 1835 Williams Street, Denver, Colorado; Lionel O. Robertson, Tobey Furniture Co., 33 North Wabash Avenue, Chicago, Illinois; John S. Rowe, 156 West Chippewa Street, Buffalo, New York; Alfred V. Shaw, 1525 North 36th Street, East St. Louis, Illinois; George F. Shepard, 193 School Street, Milton, Massachusetts; F. Haskell Smith, Vice President and General Manager, New Jersey Car Spring and Rubber Co., Jersey City, New Jersey; Paul D. Smith, 565 Washington Boulevard, Chicago, Illinois; James Smyser, Post Office Box 35, Harwich, Massachusetts; Russell T. Starr, 807 Third Avenue, Brooklyn, New York; Charles H. Stone, Rochester Gas and Electric Corporation, Rochester, New York; Harrison S. Taft, care George S. Leary Construction Co., Norfolk Navy Yard, Portsmouth, Virginia; W. H. Thomas, Herrick Voigt Chemical Corporation, Bayonne, New Jersey; John Tilley, care Marc Eidlitz & Sons, 30 East 42d Street, New York City. Charles E. Trout, care Henry Steers, Inc., 17 Battery Place, New York City; Charles W. Tucker, 25 Cherry Street, Lynn, Massachusetts; John H. Willis, Construction Division of the Army, 1-838 Building C, 7th and B Streets, N. W., Washington, D. C.

Taft, who had been reported lost by the alumni office, laughed at the idea that he could get lost. The trouble is he has been building dry docks at such a speed and breaking records thereat that no one could see him for smoke and did not realize where he was.

Myron E. Pierce was very busy in the defense of Boston Common, which recently underwent one of the periodical attempts to take a strip for widening the adjacent street. In this particular case the result was a compromise agreed to by Pierce.

Harry Baldwin has sent the secretary a copy of the *General Electric Review* containing an article by him on the development of the Mobile Searchlight Power Units for the United States army. The General Electric Company did some wonderful work during the war along the line of reducing the size and weight of these units without reducing their strength and capacity. In a general way it may be said that a Cadillac chassis was somewhat modified as to become the power plant for the searchlight and that the work was hustled to such an extent that these units were available for our men in Europe and also underwent thorough tests in the United States to show their adaptability in the roughest of conditions.

An aftermath of the Boston police strike was the damage claims filed. The following excerpt from the Boston *Transcript* is particularly interesting to '96 men. "Many claims have been filed at City Hall in connection with the police strike, but none is more interesting than that of Reverend W. M. Partridge of 30 Academy Street, South Braintree, who acted as a volunteer policeman. He complains to the city council that the heavy revolver which he was obliged to carry wore a hole through the side of his coat for which he claims \$55 damages. In his claim he said: 'The coat was damaged by wearing a hole through the side from the revolver which was carried in the pocket of the overcoat, when riding in an automobile. It will cost \$55 to replace the overcoat!'"

While on the subject of publicity it is interesting to note that the Boston *Traveller* of a recent date gave a cut of Henry Grush in shirt-sleeves and overalls with the following story, all of which the secretary can vouch for as being true.

"Technology class of 1896 was a great class with special emphasis on the 'great'. One of its number who is shining with a goodly degree of brilliancy and success is H. G. Grush, assistant engineer of the outside plant of the telephone company. Way back when Farnsworth Street, South Boston, was a daisy pasture, Mr. Grush came to the company in the construction department as a general all-round man. For two years he stuck to the 'all-round job' and then was transferred to cable splicing. That's where he is best known to all of his fellow-workers, for he started at the bottom and worked up. If you want to know what 'the gang' thinks of Mr. Grush, ask any cable man. They all swear by him. His hobby is his work, and he's a twenty-four hour man when occasion demands."

Newspapers reported that Captain R. E. Bakenhus was the recipient of a Navy Cross awarded by Daniels. While the honor of such a cross has been lessened somewhat by the action of the Navy Department, still 1896 men will agree that Bakenhus fully deserved the award.

The competition between street cars and jitneys which has become acute in some parts of New England, and particularly in Massachusetts, is a problem that must be solved soon. Paul Litchfield has come out with the opinion that the trolleys are doomed. The following is a summary of his speech before the Detroit and Cleveland sections of the Society of Automotive Engineers.

"Mr. Litchfield declared that the trolley must go, stating that it has reached a point where it cannot compete with the motor bus. For financial reasons extensions are impossible, so the street car must give way to the gas-driven vehicle that can aid development of suburbs without heavy investment in franchises and equipment.

"Increase in traffic has sounded the death knell of the trolley. Streets cannot easily be widened to give more track room, and continuous traffic movement is imperative. Therefore, the whole street service must be utilized by a carrier that can go to the curb to take on or discharge passengers—the trolley must go underground, as in London—if it remains in existence.

"The Goodyear factory manager pointed out the immobility of freight cars and delays necessitated in waiting to make up trains for given destinations."

It is with deep personal regret that the secretary reports the death of Joe Hewett which occurred in Brockton, December 15, 1919, in his forty-sixth year. He had been ill for many months past.

"Mr. Hewett was born in Brockton, July 20, 1873. His father was Herman Hewett, founder of Herman S. Hewett & Co., jewelry business, and his mother was formerly Miss Mary Copeland. He received his early education in the Brockton schools and graduated from the Brockton High School in 1892. During his high school career he was major of the high school cadets and played football to some extent.

"Mr. Hewett spent one year at Brown University and then entered the Massachusetts Institute of Technology, where he was graduated in 1896, with an engineering degree. His first work after leaving college was with the city engineer's department, making the original surveys of the city's present water system from Silver Lake.

"In 1897 he took a position in the office of the George E. Keith Shoe Co., was promoted to superintendent of the No. 2 factory and then to superintendent of the No. 1 factory. He went to the E. E. Taylor Shoe Co. in 1904 as superintendent and there continued to demonstrate his hobby for work which placed him in the ranks of the country's most efficient shoe manufacturers. In 1906 he became a member of the firm.

"At the time of his death the Brockton factory had more than doubled in size and output and the firm had established a factory in New Bedford and one in Nashua, New Hampshire. When the war broke out the Taylor Co., through Mr. Hewett, was one of the first concerns to manufacture the Russian army shoes and when the United States entered the war the firm received several contracts for United States army shoes.

"Night and day shifts were established and day after day throughout the war work Mr. Hewett gave eighteen hours a day to his work at the factory.

"His closest friends feel that his devotion to work led to his ill health. He had declined to relax from his arduous duties when he should have taken a long rest.

"Next to work his greatest hobby was travelling. He had visited Europe and travelled extensively over the United States. His education had been complete and he had always been recognized as a deep thinker, well informed as a well read business man could be.

"In 1901 he married Miss Alice A. Thatcher, daughter of Mrs. Mary Thatcher and sister of Dr. George A. Thatcher, Mrs. Marion Thatcher Rankin and Miss Lou Thatcher. His home life was ideal. He was also very devoted to his mother, Mrs. Mary O. Hewett, whose death April 14, 1914, was a severe shock from which it is said he never recovered.

"Although he had not been enjoying his normal health Mr. Hewett has continued his work with the Taylor Co. In 1917 Bruno Schwarz of Salem was engaged as an assistant to Mr. Hewett but only to relieve him of certain detail work in order that he might devote his time and energy to other phases of business.

"Mr. Hewett was a member of all the Masonic bodies, Paul Revere Lodge, A. F. and A. M., Satucket Chapter, Brockton Council, Bay State Commandery, K. T., of which he was adjutant for about ten years; Scottish rite bodies, including the thirty-second degree Masons, Massachusetts Consistory.

"At the time of his death Mr. Hewett was first vice-president of the Commercial Club, a director of the Brockton National Bank, a director of the Montello Co-operative Bank and a member of the executive committee of the Brockton Shoe Manufacturers' Association.

"He was the first president of the Montello Co-Operative Bank and held the position up to three months ago, when he resigned because of failing health. He was a member of the Thorny Lea Golf Club and enjoyed the sport to some extent, as he did bowling tournaments at the Commercial Club.

"He resided at 191 Prospect Street, which had been the home of Dr. Charles Field, and which Mr. Hewett purchased three years ago. A widow survives him, also Herman S. Hewett, a half-brother; Miss Nancy Hewett, an aunt, and Justin Hewett, an uncle."

Con Young reports that he appears to be permanently located in Washington. He bought a new house at Chevy Chase that was not quite finished and as he was unable to get any contractor to take care of the work of completing it and building a new garage, it was up to him to supervise the work himself and do a lot of it. He was very anxious to get his home in shape before cold weather set in and he just beat the frost by three days.

He is continuing in Washington as the engineering representative of the Armstrong Cork Company. This simply obligates him to act for them in connection with specifications issued by the Government Department but does not involve him in any local commercial work of any kind. He is free to take on any other accounts with other concerns that will not prevent his giving proper service to the Armstrong Company.

Myron L. Fuller was elected first president of the newly organized Southwestern Geological Society, which will have its headquarters at Dallas, Texas, with sections in the principal cities of the Southwest. Mr. Fuller left Massachusetts two years ago to become chief geologist of the Sun Company and has since been stationed chiefly in the Texas oil fields, where the company has drilled some fifty successful wells with production ranging upwards to as high as 7,000 barrels per day per well.

Charley Hyde made a professional trip east during the holidays and was able to spend about twenty-four hours around Boston and incidentally made a call on Rockwell. Charley reports that he is busier than ever since getting out of war work and getting back into his regular teaching and consulting line.

At the Alumni banquet in Walker Memorial on January 10, nineteen members of the class appeared, which is believed to be a record for such an occasion: John Ashton, D. W. Beaman, F. W. Damon, H. G. Grush, G. P. Hatch, H. W. Hayward, W. R. Hedge, W. H. James, C. E. Locke, E. S. Mansfield, G. E. Merryweather, M. E. Pierce, E. H. Robinson, J. A. Rockwell, N. F. Rutherford, N. H. Sanderson, Herbert E. Smith, C. W. Tucker and S. F. Wise. In addition H. B. Emery, '89 and W. C. Wilson, '11 sat at '96 table. Damon reported that Walter Coristine has been in Canada for a number of years but is now in Framingham and plans to locate in Boston. Henry Hedge has been ill and was unable to attend. In the case of Ashton it was his first appearance with the class since student days. He took a special course in architecture and has been located in Lawrence ever since he was at Technology. Merryweather made the trip from Cleveland and brought his usual cheer and good spirits.

While the class record for the fund is not final the following figures will be of interest. Total names on class list, 354; total number of subscribers, 214; total amount subscribed, \$57,418; range of subscriptions \$1.00 to \$10,000; average subscription \$268; percentage subscribing, 60 per cent. Of the twenty-five ladies on the class list, 18 subscribed, making the percentage of ladies subscribing 72 per cent. This shows good work on the feminine side. Considering that '96 has no DuPonts on its roll, the secretaries feel that the showing in amount subscribed was most excellent.

1898

A. A. BLANCHARD, *Secretary*, Massachusetts Institute of Technology,
Cambridge, Mass.

November 18 the local members of the class met at dinner at the City Club and much enjoyed hearing Major J. C. Riley and Captain F. B. Dawes tell how they accomplished results in the Aviation Department and in the Engineer Corps respectively in France. The events of the recent Class Reunion at Lake Placid were discussed and the foundation of plans for our Twenty-Fifth Reunion were laid through the appointment of the following committee: E. R. Barker, Chairman, E. F. Russ, C. F. Wing, Jr., R. S. Allyn, L. D. Gardner, and the secretary, ex officio.

Dr. Alice Weld Tallant received a Croix de Guerre and an honorary grade of Lieutenant in the French army for work done in a French military hospital near Chateau-Thierry.

George Lawrence Smith, having completed his work on the Boston army supply base, on which project he had charge, for the designing and supervising engineers, of the architectural work on all the buildings, announces his return to private practice at 15 Beacon Street, Boston, where he is associated with Fay, Spofford, & Thorndike, Consulting Engineers.

A. H. Jacoby announced a few weeks ago that he had given up active business and was living on a farm in Ashby, Mass. Yet word just comes today, that last Saturday, December 20, he sailed for Europe to represent American dyestuff interests, to remain there four or five months.

E. S. Chapin has been spending a large part of his time in Washington keeping track of American dyestuff legislation.

Ira M. Chace, Jr. is now with the Akin-Denison Company, 231 Union Street, New Bedford.

E. F. Russ and A. A. Blanchard, as members of the Massachusetts State Guard, each served a number of weeks in policing Boston at the time of the strike of the policemen.

W. W. Stevens, who was for some years manager of the construction and manufacturing department of the Standard Oil Company of New York in their North China territory, is now associated with the Texas Co. in New York in the capacity of superintendent of the terminal and equipment division of the export department, which has charge of all construction work in foreign territories; and also as superintendent of the fuel oil division of the export department, which has charge of all exports marketing of fuel oils. He has associated with him W. E. Booth, '08, formerly electrical engineer with the Western Electric Company and Allen F. Brewer, '13, Ensign United States Naval Reserve Force, who served in the capacity of warrant machinist on board the oil tankship U. S. S. "Edward L. Doheny, 3d."

A. A. Packard is works manager of the Taylor Instrument Company in Rochester, N. Y. Charles H. Smith has recently moved to Providence, he being vice-president and assistant treasurer of the Blackstone Mutual Fire Insurance Company, 802 Grosvenor Building. Lester Gardner has retired from army life, where he served as major and is back at his job at the Gardner-Moffat Company, Incorporated, publishers of aeronautic and trade journals. He has recently been elected president of the Technology

Club of New York. V. R. Lansingh is also back in civil life, being located at 4018-24 Cherry Street, Cincinnati, with the Lunken Window Company, manufacturers and distributors of the very latest and highest grade thing in window units with disappearing sash and fly screens.

Robert E. Kendall writes from Port Ivory, Staten Island, N. Y., where he is with the Proctor & Gamble Manufacturing Company, as follows:

"As my new address indicates, I am now living on Staten Island and am filling the position of Chemical Director at the Port Ivory plant of Proctor & Gamble. This business to be sure is somewhat distantly removed from the manufacture of military smokeless powder but the latter industry has simply ceased to exist, i. e., in so far as the du Pont Company is concerned. I finally became weary of waiting for something to open up with the du Ponts and decided it was best to get started in some more stable chemical industry. Have now been at Port Ivory a little over two months and am beginning to learn a little about soap making and its allied industries.

"As you know I was gun cotton superintendent of the Hopewell Works at Hopewell, Va., which was beyond all question the largest, and I believe the most successful nitrocellulose plant in the world. During the height of its productivity the plant was capable of turning out about thirty-six million pounds per month dry weight of nitrocellulose.

"I saw the birth of this wonderful plant, had an active part in its successful operation, and finally witnessed its demise and gradual disintegration. The last chapters of Hopewell's history were saddening to say the least, and in more ways than one I was glad to get away from the depressing atmosphere.

"My location is now nearer Boston than at any time since graduation, so many, many years ago and I shall look forward to getting up that way occasionally."

George Wadsworth writes under the letterhead, United Aircraft Engineering Corporation, 52 Vanderbilt Avenue, New York, as follows:

"It was with great regret that at the last moment I found it impossible to attend the Class Reunion at Placid and I am anxious to receive a resume of proceedings and learn of all that transpired.

"As you probably know, I entered the service of the Government in April 1917, and was assigned to the Aircraft Engineering Department of the Signal Corps. After various details in Washington and at Langley Field, Hampton, Va., where I had charge of the tests made on foreign designed and built airplanes, I was at the request of Admiral Taylor, in charge of the Bureau of Construction and Repair, United States Navy, detailed by General George O. Squiers, Chief Signal Officer of the Army, for work at the Naval Aircraft Factory, Navy Yard, Philadelphia, Pa.

"As Chief Engineer of the Naval Aircraft Factory from October, 1917, until shortly after the armistice was signed, I had entire charge of the design, production drawings, testing, inspection, etc., in connection with the output of twin Liberty engined seven ton gross flying boats used for bombing and patrol purposes in the North Sea and elsewhere, under the direction of the United States Navy.

"The engineering personnel at the Naval Aircraft Factory was built up from zero to upwards of four hundred members when the armistice was signed.

"About one hundred thirty twin engined flying boat units were shipped abroad and in actual service when the armistice was signed, and approximately one hundred other units were completed and boxed ready for shipment on the memorable November eleventh.

"The flying boat units built at the factory were copies of English design, and it is worthy of note that the first production unit was shipped just six months after the receipt from England of incomplete drawings only, no sample of the unit to be constructed at the aircraft factory being available. It is also noteworthy in this connection that the first test unit of this design was successfully flown exactly five months after the receipt of the incomplete drawings above referred to.

"I was promoted to major in October, 1917, and received honorable discharge on December 30, 1918.

"My intimate association with aircraft and allied problems for fifteen months during the war led me to a thorough belief in the immediate future for commercial aviation. With the end in view of following this line of work, I became associated with the United Aircraft Engineering Corporation, New York City, February of this year, and am now vice-president and a director of the corporation.

"It is with reasonable assurance that I register expectations to attend the next '98 reunion via the air route."

The All Tech Reunion comes next June and all Tech men are planning their affairs so as to be able to come.

1899

W. M. CORSE, *Secretary*, Monel Metal Products Corporation, Bayone, New Jersey

J. B. Ferguson should be given credit for the excellent account of the reunion at Lake Placid in September, published in the last number of the REVIEW. Through an oversight this was not done.

W. M. Corse has resigned his position as technical superintendent of The Ohio Brass Company, Mansfield, O., and accepted a position as General Manager of the Monel Metal Products Corporation of Bayonne, N. J. Corse will be on his new job, January first.

The local committee has been working hard to bring the number of pledges for the class of '99 up to those of other classes. We are aiming for a 100% record as to the number contributing. On December 11, our record was 65 members contributing, a total of \$16,794. I wish that the members of the class would realize that we cannot make a record for the amount of money but we can show the proper spirit by having a large percentage of the members contribute.

In addition to assisting in the work for the class of '99 I have endeavored to organize the campaign on the "get" side in New England outside of Boston and vicinity. Captains were appointed in all the principal cities and towns and they are appointing their own lieutenants and are covering these cities and towns thoroughly.

The contract is a special feature of the "get" campaign and the value of it is appreciated by the most progressive and best managed industries all over the country.

Now for one last word on the Endowment Fund,—will not every member of the class of '99 who has not as yet subscribed fill out his pledge card and send it in immediately? Do not refrain from doing this for fear that the amount is too small, for no amount can be too small in this case.

1900

INGERSOLL BOWDITCH, *Secretary*, 111 Devonshire Street, Boston, Mass.

Friends of Steve Brown were greatly shocked at seeing in the paper an account of his death by drowning in Sebec Lake on December 6. He was pulling his boy on a sled when the ice broke and he fell into the water. His boy went for help, but returned too late with it to save his life.

Steve was interested in the construction of the tunnel under Mount Royal in Montreal, which was to bring a great deal of cheap land within a short distance of the main part of the city. A short time ago he left Montreal and took up his residence in New York. The sympathy of the class goes to his wife and children.

The Class Committee in charge of raising money for the Endowment Fund has been giving a lot of time to the work but is a little disappointed that more members of the class have not contributed. Allen and Fitch especially have given a great deal of time and thought and deserve the thanks of the class for what they have done.

Some of the men have complained that they have received too many notices and requests for contributions. They do not realize that they bring it upon themselves by not answering promptly the first notice they get. It has been the aim of those connected with the raising of the fund to get every graduate and every man ever connected with the Institute, to give something if possible. It was known at the beginning that the Alumni could not subscribe all the money needed and that outsiders would be asked to help. An outsider will contribute much more readily if he knows that the Alumni are backing the fund to the last man. It is for this reason that so many notices have been sent, so that every Alumnus will get one at least, and those who get more than one will know that they are not concerned with it if they have already subscribed. For the same reason notices are being sent out for war records. The names of those who answer promptly will be checked off and they will not receive a second notice. Those who have not tried to get information about people do not realize how trying it is to have no notice taken of their requests. Everybody can spend a little time in filling out the answers and nobody should be afraid to state that they did not do anything.

The Institute is planning to get out a new register of students and it is very important to have every one answer the request for addresses. Be sure to look over the list of "lost" members of the class which Allen sent out and send him the addresses of those you know about.

Harriet Webster Balcom, born December 19, 1919, to Mr. and Mrs. R. Wilfred Balcom.

1901

ROBERT L. WILLIAMS, *Secretary*, 107 Waban Hill Road North, Chestnut Hill, Mass.

During the past two months the 1901 Technology Educational Fund Committee has been very busy rounding up the '01 men to contribute to the fund. This committee has been composed of John F. McGann, chairman; Ralph H. Stearns; James F. Monaghan; and R. L. Williams, secretary. The contributions have come in in goodly numbers and we stand well up in the list of classes.

Albert W. Higgins is chief engineer of John E. De Wolf Co., Milwaukee, Wis., public utility operators.

Theodore F. Lange was assistant manager and purchasing engineer on the construction of the government sulphuric and nitric acid plants at Nitro, West Virginia, from January 1918 to January 1919. Since then he has been a member of the Valuation Board for the smokeless powder plant at Nitro in the United States Government employ.

Wednesday, October 29, the class had a luncheon at the Boston City Club. The main business of the meeting was the consideration of the best means for raising the Technology Educational Fund.

Professor Frederick H. Sexton, president of the Nova Scotia Technical College, was recently given the honorary degree of D. Sc. by Acadia University and L.L. D. by Dalhousie University at its centenary convocation. These degrees were in recognition of his work in technical education and in the vocational rehabilitation of disabled soldiers.

The mailing list of the class contains three hundred twenty-five names. Up to date ninety-six have filled out their blanks for the War Records Committee, giving an account of their work during the war. John H. Ruckman writes the secretary "There seems to be a feeling abroad that men who had made money out of the work performed by them in the war should not send in their replies. This should not be the case, for a large part of Technology's contribution to the national defense was the work of Tech men in industrial fields. In connection with the Educational Endowment Campaign, the question is being brought up constantly, 'What work did Technology's former students do in the recent war?' This question can be answered by the individual record of every man." If you have not already done so, please send the War Record Committee the information it desires at once.

The class committee for the Endowment Fund in Buffalo, N. Y., has been composed of N. K. B. Patch, chairman; F. S. Love, H. P. Parrock, and S. J. Stone.

Ellis F. Lawrence has been chairman of the fund committee in Portland, Oregon and W. I. Bickford of the committee in Pittsburg, Pa.

Joseph D. Evans writes, "Organized the Evans Engineering Corporation, of which I was president, for the purpose of loading fixed ammunition for the United States Government. This company loaded more three-inch and seventy-five millimeter high explosive shells in any one day, any one month, and a greater total up to the signing of the armistice than any other company loading similar size shells in the United States.

"Was one of the organizers of the Atlantic Loading Company, which constructed the largest shell loading plant in the United States, at a cost of fifteen million dollars. Time of construction nine months. This project carried with it a two and a half million dollar housing development.

"In June 1919, with Lieutenant-Colonel Arthur Adams, formed the Adams, Evans & Company, engineers and contractors."

Willard W. Dow is comptroller for the American International Corporation and is located in New York City. He writes "Mat Brush is launching ships at Hog Island hand over fist."

The following changes in addresses have recently been received: L. H. Bigelow, Capitol Building, Honolulu, T. H.; H. S. Folsom, care John A. Roebling's Sons Company, Los Angeles, Cal.; V. E. Lacy, 150 Magee Avenue, Rochester, N. Y.; H. W. Maxson, care U. S. Steel Products Company, Montreal, Canada; F. I. Merrick, 1004 Empire Building, Pittsburg, Pa.

1902

FREDERICK H. HUNTER, *Secretary*, Box 11, West Roxbury, Mass.

BURTON G. PHILBRICK, *Assistant Secretary*, 585 Boylston Street, Boston, Mass.

Ken Lockett was married on November 5, to Grace Everingham of Evanston, Illinois. Cards announce that they will be at home after the first of December at the Evanston

Hotel. Our bachelors are getting scarcer every day, who's next? — Geromanos completed his work for the Motor Transport Division of the army by establishing Motor Transport training courses at a number of universities in the central and western parts of the country. He is living for the winter at 225 Chestnut Hill Avenue, Brighton, Mass., and the hustling work that he has put in as chairman of the class committee on the Endowment Fund Campaign is evident to all.

Avery is located in Greenfield, Mass., where his address is Davenport Block. We have not yet learned what he is up to. — "Dimmy" Bartlett and his bride have completed their transcontinental wedding trip and are located at 301 South Pacific Boulevard, Huntington Park, Cal. — George T. Eagar, who has spent some years in the Adirondacks recovering his health, is now located at Balston Spa, N. Y., where he is carrying on a business in electrical engineering and contracting. He writes that he spent last summer in forestry work for the Conservation Commission, having charge of two camps on Lake George, and having his family with him most of the summer. — Everett is naval architect with the Union Shipbuilding Company, Baltimore, Maryland. He still resides in Annapolis, where he used to be instructor at the Naval Academy, and makes the daily run to Baltimore by auto. — Paul Hooker is now located at Niagara Falls, N. Y., with the Hooker Electrochemical Company. — Jackson is manager of the Guttenberg, N. J., Refinery of the American Cotton Oil Company, having been transferred from Cincinnati, where he had been in charge for the same concern for some years. — Charlie Kellogg is nominally living in Brookline, Mass., but spending most of his time trying to straighten out the affairs of the Brooklyn Rapid Transit. — Moltedo is clerk of the East Boston District Court, and residing at 167 Leyden Street, East Boston. — Adrian Sawyer is manager of the Tanner's Cut Sole Company, Wareham and Albany Streets, Boston. — Captain Paul Hansen has been mustered out and is now with the Engineering Bureau of the State Board of Health, Springfield, Ill. — Edward Cutter is now located at 337 South Franklin Street, Chicago. — Lester Hammond is with the Elliott C. Brown Company, Contractors, of 70 East 45th Street, New York City, his residence address being Hawthorne Avenue, Port Chester, N. Y. — Charles H. Hickey is located at 305 Middle Street, Braintree, Mass. — Mardick's present address is 570 West 189th Street, New York. — Houghton Sawyer is practicing architecture at 808 Sharon Building, San Francisco, Cal. — Herbert Raymond's address is 1 Prospect Street, St. Albans, Vt. — Paul Weekes is now located at 1335 North Munroe Street, Stockton, Cal. — Irving Williams has moved to Chambersburg, Pa., where his address is 571 Montgomery Avenue. — William J. Winslow whose address has been missing for some time on our records has been located in Butte, Montana, his address being 1845 Philips Avenue.

William B. Mansfield died September 14. Mansfield had been in California and Mexico engaged in mining and more recently in ranching for many years. In 1915 he had a lively time getting out of Mexico. Mansfield was married in 1903 to Mrs. Flora M. Williams. Besides his wife, he is survived by two step-children, the eldest of whom is a son about college age. His home since 1916 has been in Perris, Cal.

Word has just reached us of the death of Joseph Wilbur Durbin, on February 19, 1915. Durbin was for some years vice-president of the Improved Moulding Manufacturing Company of Philadelphia, and was later connected with the Western Electric Company, New York City.

1903

MYRON H. CLARK, *Secretary*, 1790 Broadway, New York, N. Y.

RALPH H. NUTTER, *Assistant Secretary*, Box 274, Lynn, Mass.

CHANGES OF ADDRESS

Annie M. Barber, 29 Wall Street, Wallingford, Conn.; William J. Bay, Bureau of Construction and Repair, Navy Department, Washington, D. C.; Edward M. Chadbourne, 503 Market Street, San Francisco, Cal.; Ernest J. Cronenbold, Post & McCord, 101 Park Avenue, New York City; Hewitt Crosby, Foundation Co., Port Huron, Mich.; Frank R. Farnham, Albert Frank & Co., 26 Beacon Street, New York City; Samuel A. Fletcher, 320 South 54th Street, Birmingham, Ala.; Thomas M. Hamilton, Electra, Texas; Henry G. Harris, 1170 Broadway, New York City; Raymond Haskell, Light House Establishment, Staten Island, N. J.; J. Russell Jones, Chicago Tel. Co., 230 Washington Street, Chicago, Ill.; Ralph C. Jordan, Box 466, Columbus, Ga.; Jesse S. Joseph, Leo H. Hirsch & Co. 300 East 22d Street, New York City; Robert F. Manahan, 52 Kirkland Street, Cambridge,

Mass.; Arthur S. Martin, 243 Harvard Avenue, Allston, Mass.; Frank P. Montgomery, 15 Clinton Street, Newark, N. J.; Lawrence H. Underwood, 355 Alameda Avenue Youngstown, Ohio.; William H. Whitcomb, Box 606, New Haven, Conn.; Lewis Wehner, Pawling & Harnischferge Co., Milwaukee, Wis.; Richard T. Wilder, American Smelting and Refining Co., Matehuala, S. L. P., Mexico.

1904

HENRY W. STEVENS, *Secretary*, 12 Garrison Street, Chestnut Hill, Mass.

No report received from the secretary.

The Massachusetts Institute of Technology counts a good many aviators among her sons but none so famous as Earle Ovington, '04. Long before the rumors of war brought aviation to the fore in the minds of men, Earle Ovington was performing hair-raising feats in the air. As a boy he had a vivid imagination and spent long hours dreaming, he says, of the wonderful feats he would perform in the air when he grew up. He had no idea then that modern science was preparing a way for him to carry out those dreams, to go far beyond the wildest adventures his mind could conjure up.

True to his boyhood leanings, he took up the study of electricity and later aeronautics at the Massachusetts Institute of Technology. The study of aeronautics was in its earliest stages hardly more than the theory of aerodynamics. But Ovington by no means confined his activity to his studies. He was always up to something, and went into everything he did head over heels. He wanted to go into athletics, and though every one laughed at him when he expressed that desire, he went ahead in spite of discouragement. He chose track—he was a thin, rather delicate chap—and the hardest branch of the sport, the high hurdles. But he ended up as the New England champion. In his junior year at the M. I. T. he went abroad. He saw his first airplane in France. This was in 1903. Incidentally he brought back a number of slide rules in the shape of watches and sold enough of them to his classmates to pay for his trip.

In his senior year, the doctor told him he had tuberculosis and was going to die. He decided that if he must die, he would rather die in the air. So he borrowed \$10,000 to go to France to buy an airplane.

While in France, some one introduced him to the Bulgarian bacilli, familiar to us under the names of kumyss, fermillac, etc. He took these cultures, regained his health and returned home with his plane and his bugs too.

On his return to America, Ovington started exhibition flying with his "Dragonfly," the Bleriot machine that has made his name famous. At various times he tried other machines, but always returned to his favorite, which his French mechanic, Alfred, kept tuned up to concert pitch. It was in this old reliable that he won the famous \$10,000 Tri-State race; Boston—Nashua, New Hampshire—Worcester, Mass.—Providence, R. I.—Boston. Only one other plane finished in this race, a biplane, driven by Lieutenant Milling.

At the Chicago meet in the summer of 1911, the first in America to introduce racing in the air, Ovington won the race for monoplanes, though it was his first attempt at track racing. He deserves immense credit for that bit of flying, for his opponents were Tom Sopwith, best known as the inventor of the Sopwith plane, and Rene Simon, an expert aerodrome flyer from France. The race was twenty laps, each lap being a mile. At first Ovington found it difficult to turn the sharp corners at each end of the elongated track. There was a deadly danger in banking too steeply on the turns and falling into a side slip. But he soon overcame this difficulty and as a bystander was heard to say, "That thirteen boy didn't leave much paint on them pylons at the ends of the track!"

On September 25, 1911, Ovington took up the first bag of aerial mail, receiving it from the hands of Frank Hitchcock, postmaster-general at the time, and delivering it at Mineola. He continued this mail service for days, always carrying the seventy-pound leather bag balanced on his knees. He could not land with the bag encumbering his movements, so when he got five hundred feet above the field he threw the bag out, aiming it at the postmaster's head.

In the meantime, he spread the use of his Vitalait, as he calls his Bulgarian cultures, all over the country. Mr. Vail and Mr. Bell of telephone fame are among his customers. He sends them fresh cultures every other day. That is just the beginning of his activity however. Although he was traveling all over the country giving exhibitions of flying, Ovington found time to carry on his study of high frequency electricity and aeronautics and has several inventions to his credit. His passion for electricity has earned him the

nickname of "Bolts." He delivered many lectures during that time, too, speaking on such diversified subjects as: "Personal Reminiscences of a 'Bird Man'"; "Electricity at a Million Volts"; "Hydro-aeroplaning, the New Sport"; "Our Invisible Friends and Foes," a talk on good and bad bacteria and their relations to health. His endless fertility of invention is illustrated in the trap nest he devised for hens—so arranged that when the hen laid an egg, she stamped it with her name and the time of day. He is an expert slight-of-hand artist and amuses his friends for hours on end with his "magic." When the war came on, he invented a revolving disc that shot off bullets in such number that the government could not afford to use it.

At present he is giving most of his time to the Curtiss Airplane Bus Line which runs between New York and Atlantic City.

The name of Mrs. John D. Mackay, '04, a prominent Quincy woman, is included in the list of graduates who have responded to the M. I. T. endowment committee's request for reports from women graduates. Incidentally the committee worded their request: "Tell us what you can of yourself, even if you have just married and settled down."

Mrs. Mackay's response to the committee's questionnaire was one of the many that proved that women, even though they did marry, must not necessarily "settle down," as the Tech committee unwisely put it. Her answer is typical of those received from women who had received the splendid training with which M. I. T. equips its graduates. She wrote:

"I did not just settle down. I have made myself a scientific homemaker, have been my husband's private secretary and have written for magazines and newspapers. In club work I have been chairman of education, forestry, gardening and Red Cross publicity and president of the Mothers' Association, and I have always tried to assist in the city where I live."

As chairman of the conservation department of the Massachusetts Federation of Woman's Clubs, Mrs. Mackay spoke to 50,000 women during the war, urging saving of flour, fats and sugar.

Practicing is always more effective than preaching, so this enterprising Quincy woman actually cooked \$1,760 worth of food without these three essentials, sold a recipe with each article and made this striking educational venture pay its own way. Is it any wonder such women object to the label "settle down?"

Mr. Lewis G. Gillett '04 is with the Virginia Louise Mining Co., at Pioche, Nevada as general manager. He writes as follows: "I have been head over heels in work since coming here endeavoring to make a mine out of a hopeful young prospect. There is a small margin of profit in handling the ore and big possibilities for developing more of it. The smelter contract calls for 100 tons per day but the mine is not in shape for so large a production and the result is an incessant drive to get out more ore. I shipped 2,200 tons in November, which is the largest production in the history of the mine. I expected to exceed 3,000 tons this month until the end of the coal strike left us stranded with absolutely no cars to load except such as came in loaded with supplies, which, of course, were very few. I laid off all the men I did not need for development work and have just begun to put them back the last couple of days. Cars are coming again."

1905

G. D'W. MARCY, *Secretary*, 246 Summer Street, Boston.

CHARLES W. HAWKES, *Assistant Secretary*, 23 Saxon Road, Newton Highlands.

Owing to the fact that it seemed desirable to crank up the flivver just as news for this number of the REVIEW was due, we put most of our gas in that other vehicle, so have little to report here. In the few days that the flivver has been out, however, several comments have been received, and expressions of intention to attend the reunion in June. George Jones plans to come and bring the family, if his bus will hang together, and it is hoped that many of the class will start corresponding with their friends to meet them in Boston next June.

John Damon comes in with a bran new news item that he is to be married on February 5, to Miss Frances C. Hall, in Boston. Miss Hall graduated with honors from Radcliffe, and after teaching four years became a research chemist with the navy. During the summer of 1918 she was in charge of microscopic analysis for the United States Conditioning and Testing Company, until, as John puts it, "I got her away." They are going to live at 612 Worth Street, Pittsburgh, and will be at home after March 1.

Francis F. Longley, '05, consulting civil and sanitary engineer, whose business address for some years past has been 30 East 42d Street, New York, N. Y., and whose residence has been Dobbs Ferry, N. Y., is leaving the United States on November 26, 1919, for Geneva, Switzerland, where his address will be care of League of Red Cross Societies, No. 9 Cour de Saint Pierre. He is going to assist in the organization and operation of the Division of Sanitation of the League of Red Cross Societies, and will probably remain abroad several years.

Twenty-five '05 men turned out for the big alumni banquet on January 10, adding considerable to the volume of noise and expressing satisfaction in the good showing made by the class in its contribution toward the fund.

1907

BRYANT NICHOLS, *Secretary*, 2 Rowe Street, Auburndale, Mass.

HAROLD S. WONSON, *Assistant Secretary*, care W. H. McElwain Co., Manchester, N. H.

Bob Albro became the father of his fourth child, a son, Henry Oliphant Albro, on November 29, 1919. His other children are Elizabeth and Barbara, twins, born September 24, 1915, and Robert, Jr., born January 2, 1913. Bob is with Fred T. Ley & Co., Inc. at Springfield, Mass.—Henry B. Alvord is now teaching in Wentworth Institute, Boston.—Albert F. Bancroft is one of the firm of Bancroft-Walker Co., shoe manufacturers, with office and factory at 13 Wormwood Street., Boston, Mass.—He lives at 131 Windemere Road, Auburndale, Mass.—Frederick Bachmann is with Kenyon & Kenyon, patent lawyers, 61 Broadway, New York—Edwin Bonta has returned from his service in the Young Men's Christian Association in Russia and is at 622 James Street, Syracuse, N. Y.—Lester W. Brock has left Boston and the vacuum cleaner business and is engaged in the automobile industry at Rock Hill, South Carolina.—Alfred A. Brooks is now living at 61 Blaney St., Swampscott, Mass. He is with the Lynn plant of the General Electric Co.—Albert L. Burwell's latest address is 115 4th Street, Carney's Point, New Jersey—Chester M. Butler is chief chemist with Marquette Cement Mfg. Co., La Salle, Illinois.—Benjamin F. Carter, Box 794, Mesa, Arizona.—George A. Crane, 540 Penobscot Building, Detroit, Michigan—Harry R. Crohurst is at the Marine Hospital, Wilmington, North Carolina, a sanitary engineer in the United States Public Health Service.—Charles W. Coffin, Guaranty Trust Co., 140 Broadway, New York City.—John A. Davis is with the United States Avenue, Bureau of Mines at Fairbanks, Alaska.—Albert H. Donnewald, 4537 McPherson St. Louis, Mo.—Charles A. Eaton, Prospect Street, Turners Falls, Mass.—Ernest C. Evans is a mechanical engineer in Worcester, Mass., at 757 Main Street.—Louis A. Freedman, Times Building, Times Square, New York City.—We have just a brief notice of the death on December 12, 1918 of Don S. Gates, who was active in Young Men's Christian Association work.—Col. Stuart C. Godfrey, United States Engineer office, Florence, Alabama.—Gardner S. Gould, 10 Purchase Street, Fall River, Mass.—George A. Griffin, 661 Westminster Street., Providence, R. I.—Harry R. Hall, Hyattsville, Maryland.

Charles B. Hamilton is the proprietor of the Fenway Talking Machine Co. at 255-57 Massachusetts Avenue, Boston. He is married and has a boy four years old.—Frank S. Hamilton, who for many years was located in Kansas City is now in Boston with office at Room 805, 294 Washington Street. He has invented some devices for use in railroading and is devoting his time to attending to patents and to sale of his articles.—Lawrence C. Hampton is working for the Union Oil Co. of California, at Santa Paula, California as engineer in charge of building a refinery. His permanent address is 1615 North Western Avenue, Los Angeles, California.—Walter T. Hoover, 644 Monadnock Building, San Francisco, California.—R. G. Hosea is Deputy State Engineer of Colorado with office at 121 Capitol Building, Denver, Colorado.—H. B. Hosmer, 22 Elm Street, Concord, Mass.—Chester L. Howe, Blackstone Valley Gas and Electric Co., Pawtucket, R. I.—John F. Johnston is service manager for the Union Construction Co., at Oakland, California, having charge of the personal work of this engineering and ship building organization. He has a wife and four children.—Harold A. Kingsbury is in the legal division of the patent department of the DuPont Powder Co. at Wilmington, Delaware.—“Stud” Leavell's address is Gentry Apartment, Wall Street, Joplin, Mo.—Ernest F. Lewis wrote on November 2, 1919: “My business address is 285 Beaver Hall Hill, Montreal, Canada, care of Kenneth G. Rea, with whom I am associated in the general practice of architecture, doing a good deal of bank work.—Was discharged from the army in May and came up here in June.”—M. E. MacGregor has bought a house and is living at 5 Coulton Park, Needham, Mass.—Howard H. McChesney, 5337 Woodlawn Avenue, Chicago, Illinois.

Alexander Macomber has left the C. H. Tenney Co., and on November 1, 1919, under the firm name of Carver, Macomber & West, Inc., began business for himself. Consulting and supervising engineering is the line of work, offices at 261 Franklin Street, Boston.—Stuart R. Miller wrote on November 9 saying he was hard at work superintending the erection of a new paper mill for the Charles Bolat Co., with whom he has been associated for several years. Address is 3366 Morrison Avenue, Clifton, Cincinnati, Ohio.—James G. Moore, J. Henry Steinhart Co., Apartado 1070, Havana, Cuba.—E. L. Moreland has returned from duty in France with the Engineers, and is associated with Prof. D. C. Jackson, as electrical engineer, the firm name being Jackson & Moreland, at 387 Washington Street, Boston.—George R. Norton resigned from the army on July 21, 1919, being at that time a lieutenant-colonel. His eleven years of service in the army was with the Ordnance where he was mostly engaged in industrial work, including manufacturing management. He is now manager of cost and statistical department of Eaton, Crane & Pike Co., the largest stationery manufacturers in the world, at Pittsfield, Mass. He is married, but has no children. Address is 253 South Street, Pittsfield, Mass.—O. L. Peabody is sales manager of George H. Morrill Co., ink manufacturers at Norwood, Mass.—Karl W. Richards, Room 408 Fidelity Building, Portland, Maine.—Don Robbins is at 1025 Real Estate Trust Building, Philadelphia, Pa., with Alvey-Ferguson Co., manufacturers of all kinds of conveyors.—Oscar H. Starkweather, 74 Dover Street., Brockton, Mass.—William F. Turnbull, Box 1299, Yale Station, New Haven, Conn., is teaching machine drawing and design in the Sheffield Scientific School. During the war he was in Washington in the United States Department of Labor being Superintendent of Soldiers' Re-employment Bureau. He is married, but has no children.—John J. Thomas was in charge of the war work of the American Can Co., at 120 Broadway, New York, afterwards made a business trip to South America, and now is in charge of one of the manufacturing departments of the same company. He has two daughters and lives in Westfield, New Jersey.—Major Lawrence T. Walker, C. A., 2100 Bryant Avenue, Minneapolis, Minnesota.—Joseph D. Whittemore, West Virginia Traction and Electric Co., Wheeling, West Virginia.—Albert E. Wiggin is general superintendent of the Anaconda Copper Mining Company's plant at Great Falls, Montana, consisting of copper refineries, rolling and wire drawing mills, one hundred and fifty ton-per-day electrolytic zinc plant, reverberatory smelting plant and electric furnace ferro-manganese plant. He has two children; a boy nine, and a girl seven years old.—Richard G. Woodbridge, on February 27, 1919, became the father of a daughter, Margaretta Lytle Woodbridge. This is his second child the first being a boy born February 22, 1917. Dick's address is 2206 Shallcross Avenue, Wilmington, Delaware.

Vernon S. Rood, '07, general manager of the Utah-Apex Mining Company, at Bingham, Utah, is at present enjoying a vacation in San Francisco, which is probably the first vacation that he has had since entering on his present job some years ago.

The indications are that it will prove a noteworthy vacation to him, in that it culminates in February with his marriage to the daughter of Judge Lindley. Rood has just been through the ordeal of a law suit which will probably prove a celebrated case in the annals of mining law, involving as it does the interpretation of the United States mining law when applied to irregular ore occurrences in limestone strata.

Rood seemed to be headed toward a life of single-blessedness and probably would be still on that path were it not that Judge Lindley, who was chief counsel for Rood's company, brought his daughter with him to Salt Lake City, when he made his headquarters there to work up the case. The attraction appeared to be mutual and developments moved forward very rapidly. Even if Rood does not win the case he will have the satisfaction of saying that he won a bride out of the law suit.

1908

RUDOLPH B. WEILER, *Secretary*, care Sharples Separator Co., West Chester, Pa.

LE SEUR T. COLLINS, *Assistant Secretary*, Care Imbrie & Co., 13 Congress Street, Boston.

The regular bi-monthly dinner was held on Tuesday evening, October 14, at the City Club, the following being present: L. Mayo, S. F. Hatch, E. H. Newhall, Carl H. Bangs, E. J. Scott, S. C. Lyon, E. I. Wells, Emerson. In the absence of Tim Collins, Linc Mayo took charge of the meeting. The Endowment Fund was discussed, also the Tech. War Book. The matter of having joint bi-monthly dinners with other classes was also brought up.

C. W. Morrison was married on June 30 at Merrimac Mass., to Miss Elizabeth May Rand. Miss Rand is a graduate of Smith, 1915.

We have just received word of the death last March of Leslie P. Cassino. Further mention will be made in the next issue.

A. C. Nichols announces the arrival on December 1 of Mary Elizabeth, weight five and three-fourths pounds.

NEW ADDRESSES

Henry V. Spurr, care Purdy & Henderson, 45 East 17th Street, New York, N. Y.; Carroll D. Steele, 325 West 1st Street, Duluth, Minn.; Hardy Cross, care Aberthaw Construction Co., 27 School Street, Boston, Mass.; Frank W. Willey, 3431 Stettinius Avenue, Cincinnati, O.; Major Desaix B. Myers, 623 Story Bldg., Los Angeles, Calif.; Prof. Howard B. Luther, Massachusetts Institute Technology, Cambridge, Mass.; Leander M. Brown, Jr., care Charles D. Brown Co., 40 Court Street, Boston, Mass.; J. Worth Maxwell, care Garfield Smelting Co., Garfield, Utah; Allan Seymour, care The Norton Co., Worcester, Mass.; Major Bradford B. Holmes, care Mrs. F. Holmes, Stanford Court Apts., San Francisco, Calif.; Huntley Child, P. O. Box 1538, Helena, Montana; George C. Lees, 149 King Street, Pottstown, Pa.; Walter J. E. Barcus, Ludon Road, Albany, N. Y.; Emerson F. Lyford, Thomas Avenue, Maywood, N. J.; Francis M. Bond, 1903 Baker Street, Baltimore, Md.; H. Ross Callaway, care C. F. Bally Ltd., 9 Spruce Street, New York, N. Y.; Capt. John H. Locke, Pierce Bldg., St. Louis, Mo.; Ralph T. Regnell, Trinity Court, Boston, Mass.; Charles W. Whitmore, Baxter Block, Portland, Me.; Walter L. Patton, 29 West Fulton Place, Gloversville, N. Y.; Dana W. Clark, 10th Floor Fisher Bldg., Chicago, Ill.; Carl E. Hollender, care Northern Texas Traction Co., Fort Worth, Texas; Clifford L. Wade, 180 Huntington Avenue, Boston, Mass.; Lieut. Harold E. Weeks, 131 S. 1st Avenue, Mt. Vernon, N. Y.; Capt. Paul H. Heimer, 136 Coolidge Street, Brookline, Mass.; Harold W. Griswold, Room 702, 1026 Main Street, Hartford, Conn.; Rens E. Schirmer, 1283 Milwaukee Street, Denver, Colo.; Leon A. Dickinson, Hillside Avenue, Teaneck, N. J.; Dwight Dickinson, Jr., Bureau of Medicine & Surgery, Navy Department, Washington, D. C.; John S. Coye, 234 Flushing Avenue, Jamaica, L. I., N. Y.; George Schobinger, 105 East Essex Avenue, Lansdowne, Pa.; Clifford H. Boylston, 905 Woodward Bldg., Birmingham, Ala.; Alexander C. Sloss, Jr., 912 G. R. Savings Bank Bldg., Grand Rapids, Mich.; Philip J. Hale, 645 Peoples Gas Bldg., Chicago, Ill.; Joseph B. Sando, 1501 East McMillan Street, Cincinnati, O.; Herman Carsten Schrieffer, Ranger, Texas; Henry R. Sewell, 46 Southbourne Road, Jamaica Plain, Boston, Mass.; Henry W. Shalling, Ivanhoe Regent Works of General Electric Co., East Cleveland, O.; Edgar P. Slack, 25 City Hall Place, New York, N. Y.; Edward R. Smith, 7 Tufts Street, Malden, Mass.; Joseph Pope, 30 Winchester Street, Brookline, Mass.; Robert Roberson, 220 Rantoul Street, Beverly, Mass.; Joseph B. Sands, 1501 East McMillan Street, Cincinnati, O.; Melvill B. Hall, Brown & Hall Supply Co., Railroad 2, Clayton, O.; Philip J. Hale, care St. Paul Coke & Chemical Co., Granite City, Ill.; Harold P. Gurney, 50 Park Vale Avenue, Allston, Mass.; Otto L. Golder, 60 State Street, Boston, Mass.; William B. Given, Jr., 101 East 74th Street, New York, N. Y.; Herbert T. Gerrish, 10 Haskell Street, Melrose, Mass.; Francisco Garcia, 46 Salud Street, Havana, Cuba; Ferdinand J. Friedman, 105 West 40th Street, New York City; Winthrop D. Ford, Kingston, Mass.; William Cumner Folsom, 2809 Erie Ave., Cincinnati, O.; Rufus C. Folsom, 47 Granite Street, Boston, Mass.; Burton W. Cary, 53 State Street, Boston, Mass.; William C. Taylor, 77 East Fifth Street, Corning, N. Y.; James M. Talbot, care S. S. White Dental Co., 7 Union Square, New York, N. Y.; William A. Stocking, 2937 Edgehill Road, Cleveland, O.; James R. Nichols, 28 Earl Street, Malden, Mass.; Joseph B. Stewart, Jr., Youngstown Municipal Railway Co., P. O. Box 58, Youngstown, O.; William D. Milne, 6 Glen Road, Lexington, Mass.; Arthur F. Mohan, 1912 American Trust Bldg., Birmingham, Ala.; Paul W. Norton, 100 Boylston Street, Boston, Mass.; Lloyd C. Eddy, R. F. D. 154, Barrington, R. I.; Eugene L. Brown, Jr., 4489 Washington Avenue, St. Louis, Mo.; Frank K. Belcher, 140 N. Broad Street, Philadelphia, Pa.; John C. Childs, Box 478, Cynwyd, Pa.; Hugo F. Kuehne, University Club, 2304 San Antonio Street, Austin, Texas; Edgar P. Slack, 46 Sea View Avenue, Jersey City, N. J.; Mrs. A. O. Caswell, Milford, Mass.; Leo D. Nix, Austin Apartments, Dubuque, Ia.; Charles L. Pitkin, 119 Water Street, Boston, Mass.; Edward L. Moreland, care Jackson & Moreland, 387 Washington Street, Boston, Mass.; Lynn Sumner Goodman, 7133 Buist Avenue, Philadelphia, Pa.; Lawrence A. Clark, Pontiac Leader Publishing Co., Pontiac, Ill.; Clarence W. Clark, 304 Upham Street, Melrose, Mass.; John H. Caton, Lemon Bldg., Washington D. C.; Rodney C. Caryl, 351 Atlantic Avenue, Boston, Mass.; Walter E. Caldwell, care W. E. Caldwell, Louisville, Ky.; Walter H. Byron, Williamsport, Md.; Riggins Buckler, 529 N. Charles Street, Baltimore, Md.; Edward C. Brown, 700 Hope Street, Providence, R. I.

John C. Brooks, Goudell Pratt Co., Greenfield, Mass.; Arthur E. Bremer, 44 Morse Place, Englewood, N. J.; Francis M. Bond, King's Court, Poughkeepsie, N. Y.; Henry W. Blackburn, 166 Loomis Street, Burlington, Vt.; Ralph J. Batchelder, 1723 N. Meridian Street, Indianapolis, Ind.; William E. Barton, 12 Bloomfield Street, Lexington, Mass.; G. William Bailey, 52 Elmwood Avenue, Rye, N. Y.; Alfred B. Babcock, 49 South 2d Street, Brooklyn, N. Y.; Robert B. Arnold, care Hall Tobacco Chemical Co., 3955 Park Avenue, St. Louis, Mo.; Robert C. Angell, Prince Bay, S. I., N. Y.; Charles J. Carter, Technology High School, Providence, R. I.; Ernest Whitten, 9 Portland Street, Lynn, Mass.; Thomas H. White, care White Motor Co., Cleveland, O.; Leland E. Wemple, care American Zinc, Lead and Smelt Co., 1005-22Pierce Bldg., St. Louis, Mo.; Eber I. Wells, 68 Fremont Street, Winthrop, Mass.; Geoffrey W. Welch, South Dakota Light and Power Co., Armour, S. Da.; William H. Toppan, Great Northern Hotel, Millinocket, Me.; Raymond W. Ferris, 464 N. Portage Path, Akron, O.; Albert G. Emery, 457 Central Avenue, New Haven, Conn.; Leslie B. Ellis, 594 Franklin Street, Melrose Highlands, Mass.; Herbert S. Eames, 29 Beech Street, Framingham, Mass.; Harry S. Chandler, 41 Jaques Street, Somerville, Mass.; Maurice E. Allen, 326 Smith & Baker Bldg., Toledo, O.; Oscar A. Iasigi, 9 East 40th Street, Savannah, Ga.; John Edward Johnson, 117 North 9th Street, Paducah, Ky.; W. Armour Johnston, Jr., care Atwater & Clarke, 56 Wall Street, New York, N. Y.; Richard Y. Kennard, care Turner Construction Co., 244 Madison Avenue, New York, N. Y.; Carl W. Keniston, Industrial Commission State of Wisconsin, Madison, Wisc.; S. Lock Davidson, Beacon Bldg., Wichita, Kan.; Sherwood Hall, Jr., Hotel Motor Co., 574 Commonwealth Avenue, Boston, Mass.; Ira G. Hersey, Jr., 78 Beach Street, Wollaston, Mass.; N. LeRoy Hammond, 24 Parkinson Street, Needham, Mass.; Alfred G. Blace, 1702 Elm Street, Youngstown, O.; William F. Dolke, Jr., 1841 Asbury Avenue, Evanston, Ill.; Richard C. Collins, 617 S. Union Street, Wilmington, Del.; Edmund F. Heard, 96-31st Street, Newport News, Va.; Leon D. Howe, 58-62 Water Street, Clinton, Mass.; Walter F. Hudson, 260 Valentine Lane, Yonkers, N. Y.; Russell T. Hyde, 159 Summer Street, Waltham, Mass.; J. Rinker Kibbey, Box 594, Phoenix, Ariz.; Ernest E. Kilburn, P. O. Box 1224 Wilmington, N. C.; Clarence R. Lamont, 1522 Hancock Street, Quincy, Mass.; John H. Locke, 4418 Forest Park Boulevard, St. Louis, Mo.; Arthur A. Longley, Manufacturers' Mutual Fire Insurance Co., 1526 Marquette Bldg., Chicago, Ill.; Henry V. Mack, 14 Barr Street, Salem, Mass.; Lieut.-Col. John Mather, care Adjutant General U. S. A., Washington, D. C.; J. Worth Maxwell, care Garfield Smelting Co., Garfield, Utah; James McGowan, Jr., 32 N. Front Street, Camden, N. J.; William H. Medlicott, 185 Devonshire Street, Boston, Mass.; Aaron R. Merritt, 596 Main Street, East Aurora, N. Y.; Herbert A. Cole, Jr., 50 Oliver Street, Room 801, Boston, Mass.; John S. Coye, care General Chemical Co., Laurel Hill, L. I., N. Y.; Comdr. Edwin G. Kintner, U. S. N. C. C., Balboa Heights, Canal Zone, Panama; Comdr. Roy W. Ryden, U. S. N. C. C., Navy Yard, Portsmouth, N. H.; John Tetlow, 205 N. 9th Street, Newark, N. J.; Joseph W. Wattles, 3d, 240 Chapman Street, Canton, Mass.; Comdr. George C. Westervelt, U. S. N. C. C., Superintendent Construction 411-5th Avenue, New York, N. Y.; Comdr. Paul H. Fretz, U. S. N. C. C., Mare Island Navy Yard Vallejo, Calif.; Comdr. Waldo P. Druley, U. S. N. C. C., U. S. Naval Station, Olongapo, P. I.; Comdr. Frederic G. Cobourn, U. S. N. C. C., Naval Aircraft Factory, Navy Yard, Philadelphia, Pa.; Mr. Herman C. Schrieffer, Canarsie, Brooklyn, N. Y.; Maj. Maurice E. Denny, Ardenvoehr, Cardross, Scotland; Mr. William F. Grimes, Jr., Box 2023, Ancon, Canal Zone; Mr. Melville B. Hall, care Brown & Hall Supply Co., R. R. No. 2, Clayton, Missouri; Mr. Alfred R. Hunter, care Hartford Fairmont Co., 41 Arch Street, Hartford, Conn.; Mr. Warner H. Kiefaber, care The W. H. Kiefaber Co., Catolpa Drive, Dayton, Ohio.

1909

CHARLES R. MAIN, *Secretary*, 201 Devonshire Street, Boston, Mass.

GEORGE A. HAYNES, *Assistant Secretary*, 530 Atlantic Avenue, Boston, Mass.

Announcement has been received of the organization of the firm of Reeds & Thorpe, Power Engineers, with offices at 904 Main Street, Hartford, Connecticut.

C. S. Robinson announces the birth of Louise Stockton Robinson, born November 15, 1919.

Horace L. Clark was married at Cristobal, Canal Zone, Panama, on December fourth, to Miss Florence Baker, of Exeter, N. H. Mr. and Mrs. Clark will be at home after January first at Chuquicamata, Chile, South America.

1910

DUDLEY CLAPP, *Secretary*, Gorton-Pew Fisheries, Gloucester, Mass.

No report received from the secretary.

W. H. Mellish, '10, is resident engineer for the J. G. White Company of New York in charge of the construction of a dam and pipe line for the Latrobe Water Company near Latrobe, Pa.

The following is from the Boston *Herald*:

"Announcement is made by Mr. and Mrs. Albert B. Neill of Buffalo, New York, of the engagement of their daughter, Elizabeth Bancroft, to Dudley Clapp of Gloucester. Mr. Clapp, who is the only son of Mr. and Mrs. John Bouvé Clapp (Dr. Ina Clapp) of Dorchester, served overseas with the gas engineers' service, from which, after a long stay across he returned with the rank of captain. He is now connected with business interests in Gloucester."

1911

ORVILLE B. DENISON, *Secretary*, 63 Sidney Street, Cambridge A., Mass.

HERBERT FRYER, *Assistant Secretary*, Engineers' Club, Boston, Mass.

Over this Yuletide week end, when these notes are being typed, Friend Secretary is not in the gayest of moods — at least as regards 1911 and the Technology Educational Endowment Fund — for to date but one hundred fifty-eight of our four hundred forty-one members have subscribed, or but 38.8 per cent of the class. True, these subscribers have turned in pledges aggregating \$20,676 — thereby exceeding the late November estimate of the 1911 General Committee of \$19,000 and practically clinching your secretary's mid-December revised estimate of \$22,000. In each case, however, it was estimated that two hundred twenty-one subscribers, or one half the class would be secured, and this would be so without any argument. However your secretary and his valiant co-workers have not given up hope yet, and the coming week should bring in additional pledges as a result of a number of night-letters sent to recalcitrant and procrastinating classmates. In glancing through the list of non-subscribers it is quite shocking to see a number of men prominent in 1911 undergraduate activities failing their class and their Alma Mater in a crisis. But such is life, of course. To each and every classmate whose name is not on the final list of subscribers, the secretary herewith extends sympathy, because each is bound to sooner or later regret that the affair has happened. There is absolutely no excuse for any one failing to subscribe, for each person's own conscience is sole judge, for — and this has been made clear again and again — no amounts are to be published, names only.

In the November REVIEW your secretary outlined general, local and regional committee-men he had appointed and it is interesting to enumerate the excellent work accomplished by the majority of those appointed. Sad to relate, some of the classmates failed in any way to acknowledge the secretary's letter or do any work, but enough of the sob stuff! In the first place the choice of a General Committee proved a wise one, for certain it is that Barker, Pryor, Herlihy, Van Tassel and Wood have worked hard to make 1911's showing a creditable one. The following men for Boston and vicinity have also done yeoman service in reaching the class through personal interviews, telephones and letter-writing: Buckley, Burleigh, Comstock, Hines, Hall, Jenks, Loud, Merrill, Pead and Whitcomb. Three other untiring New England workers are Copeland in Maine, Morey in Rhode Island and Tisdale in Connecticut. So much interest have the latter two shown in the campaign that they attended the last dinner-meeting of the local committee to see how they could better serve the class. Harry Lord was appointed for Vermont, but he had been transferred in business affiliation to New York, so he and Pete White assisted in the New York City 1911 campaign. In New York State Norm Lougee and "Bunnie" Wilson looked after the class's interests. "Doc" Davis handled District of Columbia, "Joe" Fuller, New Jersey, Marc Grossman, Pennsylvania, and Don Frazier, Virginia. In the Middle West Minot Dennett and "Mike" Greenleaf handled Michigan, while in Ohio, "Larry" Odell and "Don" Stevens worked from Akron and "Kes" Barr from Youngstown. George Forristall handled Texas and "Hank" Smith, Canada. Apart from this results were in a large measure attained by personal letters, aided materially by the work of local Alumni Committees. In the Postscript Notes, to be written over the New Year's week end, your secretary is planning to show the percentage attained by the various states and foreign countries in the 1911 quota raised.

In the Hub the general and local committees have met from time to time at dinner in the Walker Memorial and as a mid-December climax the secretary issued an appeal for a 1911 dinner to be held December 12. All of the men present, with one exception, Harry Lake, were committee-men. Here is the account of the dinner published in *The Tech* of December 16:

ORIGINALITY IS ESSENCE OF CLASS OF 1911 PLANS

DENNIE BRINGS TO LIGHT MANY METHODS TO ROUND UP MEMBERS.

"Rivalling in ingenuity the Technology plan are the devices created to raise the Endowment Fund quota of the Class of 1911, by fifteen members of the class who were present at a dinner in the Faculty dining room of Walker Memorial Friday evening.

"The Secretary of the class brought with him to the dinner postal cards addressed to all members. The postals showed the weekly progress of the campaign to date. After "dispensing" with a generous dinner, the diners proceeded to add to the cards addressed to members who have not yet subscribed a personal exhortation to 'get aboard the band wagon.'

"Customary after-dinner oratory was subordinated to discussion of practical ways to help the Fund. One of the leaders in this discussion was C. T. Morey of Providence, who has been spending much of his time trying to secure subscriptions from every 1911 man in Rhode Island. Another man prominent in the dinner was H. R. Tisdale of New London, who has been paralleling in Connecticut Mr. Morey's methods of operating.

"At Mr. Morey's suggestion, the men present at the dinner decided to make a house to house canvass of members of the class resident in Greater Boston. The Providence man backed up his suggestion by offering to supervise the canvass, and by placing his car at the convenience of the local committee."

Our class has also been honored in the campaign by having seven members appointed Alumni Regional Chairmen as follows: S. B. Copeland for Bangor, Maine; N. A. Lougee for Albany and Schenectady, New York; W. W. Warner for Oklahoma; D. W. Southgate for Tennessee; D. N. Frazier for Virginia; H. H. Whithed for the State of Washington; and J. B. Pierce, Jr., for West Virginia. Then, too, your secretary has had charge of all the class organizations, another distinction for 1911.

Now, dear reader, look over these two letters from classmates, the first from a male graduate and the second from a co-ed. Then don't be surprised when you hear that Friend Secretary has added a few gray hairs since the start of the campaign. It would take a genius like B. L. T. to write a head, so "write your own!"

"No longer can I resist the appealing dope emanating from your H. Q., so I finally come across herewith.

"I'm not such a tightwad, I merely wanted something to come in at the last to encourage you.

"I have just paid the interest and the taxes and the coal man and the gas man and the grocery man and the man who mends chimneys and Santa Claus, and my own class at my original college gave a gift that cleaned me out completely last summer, and I have been so interested in the publicity campaign as conducted by "Dennie" that I did not want to interrupt it, but kept wondering what would happen next, with the result that my small contribution has been delayed until the last minute."

Once again Uncle Sam has been the conveyer of sad messages of the demise of two classmates, the first: Tench Q. Boozer of Columbia, South Carolina and the second: Alberto M. Bombrini of Genoa, Italy. Details are lacking in each case. To each of the families sincere sympathy is herewith extended.

Bancroft Hill has been confirmed by the City Council of Baltimore, Maryland, as Harbor Engineer. This is an important post and he will have upon his hands some of the most important of the expansion problems of the port.—P. V. Wells is now in Paris on a special mission for the Bureau of Standards, Washington. He is temporarily at 4 Rue Tournefort, Paris, France.—"Joe" Gershberg is now a turbine engineer with the Terry Steam Turbine Company, Hartford, Connecticut.—The M. I. T. Radio Society enjoyed a trip to the laboratories of the American Radio and Research Corporation at Medford Hillside early in December, being personally conducted through the various departments of the plant by John A. Proctor, 1911.—I. R. Pray, after being at his home in Natick, Massachusetts for a short stay following his mustering-out, has returned to Santa Clara, Cuba where he is in business.—Among the 1911 Bostonians who have done police duty as guardsmen in the Boston crisis are Henry Dolliver, "Ned" Hall and Allison Whorf.

One of the bright spots of the arduous campaign duties has been the presence in a number of cases of personal notes with the pledge cards.—Minot Dennett is in business

in Detroit with "Jack" Moses '09, under the firm name of Moses & Dennett, handling forgings, castings and other automobile parts and the prospects are looking very bright indeed, he says.—"Bunnie" Wilson is back at Niagara Falls with the Aluminum Company of America, following his C. W. S. work, and writes that his "return to Niagara Falls has been particularly pleasant, inasmuch as it permits the renewal of such acquaintances as Duffett, Hutchins, Coffin and Ryder of 1911, and the many other M. I. T. men in the city."—Oliver Powell, whose subscription to the Fund, by the way, was credited to 1912, with which class he finished his Tech career, writes:

"You will note that I am still following the shoe game with Dunn & McCarthy in Auburn, New York. War experiences are now only dim memories, but we have to dig the old uniform out once in a while to see that the moths have not been busy. I wish the high cost of living was as cheap for us!"

Another "veteran" who is back in civies "as you were" is "Bill" Warner, who is back at the head of the Warner-Caldwell Oil Company in Nowata, Oklahoma. That town "listens" worse than ever, now that prohibition seems here to stay, doesn't it?—Your secretary learns from the young man's father that Lt.-Col. S. P. Spalding, a classmate who finished at West Point, is now in Armenia.—"Larry" Odell, in addition to working with "Don" Stevens for 1911 in Akron, has been a hard-working member of the local Akron Alumni Committee.—E. H. Kruckemeyer has also been helping the Cincinnati committee.—"Bill" West wrote saying, "I am out of the city so much of the time that when I am home there is only time for business." For this reason he felt he could not accept the position of 1911 chairman for Chicago.—Poor "Ike" Hausman. Although he was the very first 1911-er to subscribe, he was surely a victim of circumstances. Through a clerical error the Fund office sent him a form letter, special delivery, that was being sent to men who wrote in saying they did not feel able to subscribe. Said S. D. letter was delivered at 2.30 A. M., but "Ike" came up smiling and laughingly wrote the secretary of it.—T. Polhemus, who was assigned to Wisconsin by the secretary, wrote that he had transferred to St. Louis and offered to help the local committee there, which he did.—"Doc" Davis has left the Benicia Arsenal in California and now it is Henry C. Davis, Jr., Lieutenant-Colonel, Ordnance Department, U. S. A., Office of the Chief of Ordnance, Washington, D. C.

"Charlie" Maguire of Providence revealed the fact that he and his wife are the proud parents of a year-old daughter.—"Bob" Wood flatters the secretary as follows:

"The telegram did it. I am busted after the War, etc., etc., but am still with you. 1911 still has some secretary, I'll say. My regards to the bunch and to yourself."

Another 1911-er who has been working hard on a local Alumni committee is "Heine" (R. E.) Zimmerman of Pittsburgh.—T. F. W. Meyer has left the Scripps Motor Company of Detroit and is now with the Willys Corporation, Elizabeth Works, Elizabeth, New Jersey.—Here's the "Good Old Spirit" displayed by Foster Russell:

"I busted up a couple of \$2500 aeroplane motors this fall, am trying to figure out how to borrow \$10,000 more to buy planes with and also how to make an income of nothing a month pay an overhead of \$300 a month and leave enough for me to live on. All I can do now is to send in a little pledge to get on the right side of the ledger. Could not act on regional committee account being laid up with bum eye. Got hit from a block of wood flying into my eye when a saw pinched as I was squaring a board. Almost lost sight."

Here is a typical cheerful letter from a classmate:

"I am enclosing a card for five dollars a year for five years. I am sorry it is not more, but as I have told you before, my position may end any time, since our work is about completed. Last month eleven hundred notices were sent out for dismissals and we never know where the axe will fall."

Likewise this one:

"I am sorry that I am unable to be one of the subscribers to this worthy cause on account of financial embarrassments from which I see no relief for five years to come."

To which the secretary replied:

"I can readily appreciate how a very large number of Tech men in your own position feel: that they cannot give any substantial sum to the Fund, and therefore must fail to contribute. However, it is obviously "Mr. Smith's" idea to have as nearly as possible one hundred percent of Tech's former students support their Alma Mater in her hour of need.

"That you may be included in the list of givers send me any "bit" that you can. No amounts will be published, so with your own conscience clear, as it must be under the conditions, you will rank on the same level with any of the subscribers."

Result: a twenty-five dollar pledge.

Harry Waterfall is back at the teaching game after two years in India in the interest

of the Angus Jute Company, a subsidiary of the Bemis Bag Company of Boston. Here is this interesting tale:

"In accordance with the request made in yours of the 10th instant, I have written the 1911 men whose names you sent me and have sent in my own bit." This is comparatively small, but is as much as I feel that I can give in view of the fact that I am in the teaching game myself and consequently contributing continuously to education by teaching for a smaller salary than I can get in practice. My delay in sending in my subscription has been due to lack of time to give the matter proper consideration. I am, of course, very glad to help increase our percentage and Tech's chances of getting Mr. Smith's four million.

"The Indian climate agreed with neither my wife nor myself, and after I had had the "flu" three times the doctor thought it wise for us to return to "God's Country." I think a few months more of Calcutta heat and humidity would have finished us. However, the two years' work was good experience and the trip going out and coming home very interesting.

"We saw a good deal of Hawaii, Japan, China, Indo-China, The Philippines, Straits Settlements, India, and Ceylon, and had three weeks in the Himalayas. I ran across several Tech men in the Orient, but no nineteen-clevener, although I heard at Singapore that "Fat" Perry had been through there just previously to our arrival.

"I have returned to the University of Illinois as assistant professor of mechanical engineering, but have not promised to stay here more than one year. I don't think I can afford to teach much longer, and there is a chance that I may go in the importing and exporting business with some Chinese friends with our head office in either New York City or San Francisco, and branch offices in Shanghai and Hongkong.

"Although it was six weeks between the time when we arrived in Boston last summer and I left for Illinois, I was not in town all that time and really had but a short time at home. And when I was home, I was busy as the deuce getting ready to leave again, so I saw few old friends. However, when I am in the East again next summer I will not fail to let you know of it.

Very best wishes for the New Year."

CHANGES OF ADDRESSES

Sydney Alling, 34 Clinton Avenue, North Rochester, N. Y.; John F. Alter, 68 Newbury Street, Lawrence, Mass.; Cedric S. Anderson, 120 Mifflin Street, Butler, Pa.; Herbert A. Angell, 401 Worcester Bldg., Portland, Oregon; John T. Arms, 70 Nifth Aqenue, New York, N. Y.; Harold S. Arnold, 96 West 31st Street, Bayonne, N. J.; Philip S. Avery, 95 Milk Street, Boston, Mass.; Harold E. Babbitt, 204 Engineering Hall, Urbana, Ill.; John L. Bagg, 89 Lexington Avenue, Holyoke, Mass.; D. C. Bakewell, Duquesne Steel Foundry, Coraopolis, Pa. Kester Barr, 237 Fairgreen Street, Youngstown, Ohio; David E. Bartlett, 809 Washington Street, Brookline, Mass.; Ormond R. Bean, 1021 Chamber of Commerce, Portland, Oregon; Eldred E. Besse, 85 Merrimac Street, Lowell, Mass.; Edward H. Blade, 520 Woolworth Building, Belvedere, Cal.; Roger T. Boyden, 206 South Brook Courts, 164 Newton Street, Washington, D. C.; Caleb S. Bragg, 31 West 58th Street, New York, N. Y.; William J. Buckley, 21 Colby Road, Atlantic, Mass.; Philip L. Caldwell, 12 Pennacook Street, Manchester, N. H.; Orliff H. Chase, Canadian Fabrikoid, Ltd., New Toronto, Canada; James B. Cheney, 134 West 18th Street, New York, N. Y.; Oberlin S. Clark, 44 Jackson Street, Pawtucket, R. I.; Raymond T. Cole, 35 Oread Street, Worcester, Mass.; Maus W. Colebrook, 407 State Street, Rochester, N. Y.; F. Lester Corts, 102 Bodine Street, West New Brighton, S. I., N. Y.; Allston T. Cushing, 16 Hawthorne Street, Crafton, Pa.; R. W. Cushing, 1418 Perry Place, Washington, D. C.; Lieut.-Col. Henry C. Davis, Jr., office, Chief of Ordnance, Washington, D. C.; Albert L. de Romana, Calle de Guanamara 303, Arequipa, Peru, South America; Clarence W. Dow, 4 Lincoln Avenue, Detroit, Michigan; Comdr. Whitford Drake, U. S. N., care Ford Motor Company, Detroit, Michigan; Carl S. Ell, 52 Clement Avenue, West Roxbury, Mass.; Francisco Fernandez, Juitiapa, Guatemala, South America; William D. Foster, 80 Washington Square, New York, N. Y.; Russell D. Francis, 33 Playstead Road, Newton, Mass.; (Prof. Augustin Frigon B. S. C. E., Ecole Polytechnique, 228 St. Denis Street, Montreal, P. Q., Canada); Henry C. Frisbie, 1430 Leland Avenue, Chicago, Ill.; Joseph C. Fuller, Green Street, Woodbridge, N. J.; Oscar J. Gilcreest, 1006 Union Street, Schenectady, N. Y.; Julian S. Gravely, Winchester Repeating Arms Co., New Haven, Conn.; James O. Greenan, Mina, Nevada; C. H. Harrington, 600 Pavonia Avenue, Jersey City, N. J.; Capt. Frederick C. Harrington, 267 Boylston, Street, Boston, Mass.; Stanford H. Hartshorn, 100 Pearl Street, Gardner, Mass.; John D. Hassett, Massachusetts State Board Labor and Industries, 405 Slater Bldg., Worcester, Mass.; Isaac Hausman, 2727 Scottwood Avenue, Toledo, Ohio; John A. Herlihy, 123 Middlesex Avenue, Medford, Mass.; Harry C.

Hess, 10 South 18th Street, Philadelphia, Pa.; Ralph A. Holbrook, Beacon Falls, Connecticut; Clifford L. Hufsmith, First National Bank, Palestine, Texas; Roy D. Huxley, Georgia School of Technology, Atlanta, Georgia; J. E. Kelley, care Blackall, Clapp & Whittemore, 20 Beacon Street, Boston, Mass.; Edward Kenway, 599 Centre Street, Newton, Mass.; T. J. Killion, Tech Club, 17 Gramercy Park, New York, N. Y.; Mark C. Kinney, care The J. S. Ringwalt Co., Mt. Vernon, N. Y.; Herbert P. Larrabee, 127 Plantation Street, Worcester, Mass.; Thomas Lathrope, Arkansas Water Co., Little Rock, Arkansas; Harry P. Letton, 1921 South 16th Street, Lincoln, Nebraska; Harry A. Lewis, Wickford, P. O. Box 309, Providence, R. I.; Capt. Harold S. Lord, Niles Bement Pond Co., 111 Broadway, New York, N. Y.; John D. MacKenzie, care Mrs. Maude MacKenzie, Baddeck, Cape Breton, Nova Scotia; Lee R. McMillan, M. Bell Son, Ltd., New Orleans, Louisiana; Charles A. Magoun, United States Department of Agriculture, Washington, D. C.; Charles A. Maguire, 1205 Turks Head Building, Providence, R. I.; Harry L. Manley, 37 Howe Avenue, Passaic, N. J.; Robert H. Mather, 51 Elm Street, Windsor Locks, Conn.; Francis A. Moore, A. P. Moore's Sons, Inc., Tyler, Texas; Chester T. Morey, 75 Medway Street, Providence, R. I.; I. F. Morrison, University of Alberta, Edmonton South, Alberta, Can.; R. E. Morse, Tech Club, 17 Gramercy Park, New York, N. Y.; Aaron L. Myers, 1025 North Cedar Street, Palestine, Texas; Simon Nath, 2 Elm Street, Methuen Mass.; Franklin Osborn, 2d, Chile Exploration Co., Chuquicamata, Chile, via Autofagasta; Clyde R. Perry, 30 Church Street, New York, N. Y.; Walter I. Phillips, 149 Elmwood Street, Wollaston, Mass.; Arthur C. Pillsbury, Dickinson Hotel, 743 Beacon Street, Los Angeles, Cal.; I. R. Pray, 12 Shattuck Street, Natick, Mass.; John Albert Proctor, American Radio and Research Corp'n, Medford Hillside, Mass.; Webster Richardson, National City Bank Building, Spokane, Wash.; Foster Russell, 320-321 Symons Block, Spokane, Wash.; Frank Russell, Jr., 17 Gramercy Park, New York, N. Y.; William C. Salisbury, 215 Palace Building, Minneapolis, Minnesota; Edgar C. Savage, 50 Central Avenue, Milton, Mass.; Ralph E. Sawyer, R. F. D. No. 4, Gorham, Maine; Howard R. Schulze, care J. J. Donovan, 310 Security Bank Building, Oakland, Cal.; O. Robert Schurig, General Electric Co., Schenectady, N. Y.; John G. Scoville, Moore Plant, Bethlehem Shipbuilding Corp. Ltd., Elizabeth, N. J.; W. J. Seligman, 840 Seventh Avenue, New York, N. Y.; Edward Sisson, 35 Coral Avenue, Winthrop, Mass.; Frank G. Smith, American Brass Co., Waterbury, Conn.; Harold A. Smith, care W. H. McElwain Co., Manchester, N. H.; William L. Smith, 16 Crest Street, Concord Junction, Mass.; Chauncey B. Smythe, The Thew Automatic Shovel Co., Lorain, Ohio; Henry R. Snyder, Pine Street, Altadena, Cal.; Donald W. Southgate, 402 Presbyterian Building, Nashville, Tenn.; Lt.-Col. Sidney P. Spalding, 1019 Middlesex Street, Lowell, Mass.; Isidore Spector, 322-324 Grand Street, New York, N. Y.; Roger M. Spencer, 328 Fairfield Avenue, Hartford, Conn.; Willson Y. Stamper, Jr., Oregon Agriculture College, Corvallis, Oregon; Robert R. Stanley, care Parker Young Co., Lincoln, N. H.; Charles R. Strong, 130 Kinsey Place, Cincinnati, Ohio; Harvey A. Sweetser, care Commercial Attache, American Embassy, Paris, France; Frank C. Taylor, 154 Laburnum Crescent, Rochester, N. Y.; E. C. Tolman, 1609 LeRoy Avenue, Berkeley, Cal.; Mrs. Mayo Tolman, (nee Ruth Dunbar), Sparkill, N. Y.; D. H. Tuck, 340 Madison Avenue, New York, N. Y.; John A. Urquhart, 38 Walden Street, Concord, Mass.; Ray D. Van Alstine, Southwestern Shipbuilding Co., East San Pedro, Cal.; William R. Walker, 17 Custom House Street, Providence, R. I.; Lewis W. Walz, 93 Main Street, Batavia, N. Y.; William W. Warner, Box 157, Nowata, Oklahoma; Harry W. Waterfall, University of Illinois, Urbana, Ill.; George S. Watson, 1927 Akaad Street, Dallas, Texas; Lawrence B. Weeks, Army-Navy Club, Washington, D. C.; Walter P. Welch, Comustion Engineers Corp., 11 Broadway, New York, N. Y.; Philip V. Wells, Bureau of Standards, Washington, D. C.; Albert B. Werby, Werby Laboratories, 88 Broad Street, Boston, Mass.; Louis L. Wetmore, 1 Bemis Place, Glen Falls, N. Y.; Houghton H. Whithed, 5016-19th Avenue, N. E., Seattle, Wash.; Gordon B. Wilkes, Massachusetts Institute Technology, Cambridge, Mass.; Charles S. Williams, Jr., 306 West 102d Street, New York, N. Y.; Albert O. Wilson, 23 Yale Street, Winchester, Mass.; Irving W. Wilson, Aluminum Co. of America, Niagara Falls, N. Y.; Lieut. Henry Wood, Bristol, Rhode Island; Erving M. Young, 916 Chestnut Street, Philadelphia, Penn.; Rufus E. Zimmerman, American Sheet & Tin Plate Co., Pittsburgh, Penn.

Harry S. Alexander, 4 East 49th Street, New York City; John A. Bigelow, 94 Dudley Street, Brookline, Mass.; Cameron Clark, 143 East 39th Street, New York City; Antonio Clavell, Ponce, Porto Rico; Joseph Gershberg, 315 Pearl Street, Hartford, Conn.; J. L. McAllen, Kennecott, Alaska; Edward Sisson, 11 Green Street, Boston, Mass.; Edward I. Weisberg, 191 Walnut Street, Roxbury, Mass.

Your secretary is quite proud to state that at this New Year's week-end, with one week left before the close of the campaign at the Alumni Jubilee Dinner, the class of 1911 has 212 subscribers or in other words the class is forty-eight and one-half percent. subscribed. As promised in the first instalment of these notes, a geographical summary for 1911 is herewith appended:

<i>State or Country</i>	<i>Members</i>	<i>Subscribers</i>	<i>Percent</i>	<i>Captain</i>
Maryland,	4	4	100	.....
New Mexico,	1	1	100	.....
West Virginia,	1	1	100	.....
England,	1	1	100	.....
India,	1	1	100	.....
Norway,	1	1	100	.....
Ohio,	18	15	83	Barr, Odell, Stevens
Connecticut,	13	9	69	Tisdale
Rhode Island,	9	6	67	Morey
Georgia,	3	2	67	.....
Washington,	3	2	67	.....
Michigan,	5	3	60	.....
Oregon,	5	3	60	.....
New Hampshire,	7	4	57	.....
New York City,	35	19	54	.....
Pennsylvania,	17	9	53	Grossman
New Jersey,	18	9	50	Fuller
Illinois,	12	6	50	.....
Canada,	10	5	50	H. S. Smith
District of Columbia,	10	5	50	H. C. Davis
Texas,	8	4	50	Forristall
South America,	6	3	50	.....
Virginia,	4	2	50	Frazier
Arkansas,	2	1	50	.....
Delaware,	2	1	50	.....
Iowa,	2	1	50	.....
Kansas,	2	1	50	.....
Nebraska,	2	1	50	.....
Oklahoma,	2	1	50	.....
Tennessee,	2	1	50	.....
Japan,	2	1	50	.....
Boston, (25 Miles),	120	62	48	Committee
New York, (Outside),	26	12	46	Lougee, Wilson
Wisconsin,	3	1	33	.....
Massachusetts, (Outside),	33	10	30	Committee
Maine,	7	2	29	Copeland
California,	9	2	22	.....
Louisiana,	1	0	0	.....
Minnesota,	1	0	0	.....
Montana,	1	0	0	.....
North Dakota,	1	0	0	.....
Wyoming,	1	0	0	.....
Porto Rico,	1	0	0	.....
Italy	1	0	0	.....
Mississippi	2	0	0	.....
Nevada,	2	0	0	.....
Alaska,	2	0	0	.....
Canal Zone,	2	0	0	.....
Hawaii,	2	0	0	.....
Mexico,	2	0	0	.....
Vermont,	3	0	0	.....
1911 Total, January 3,	437	212	48½	

It is interesting to note from the above that our class is scattered in forty-three State and territories of the United States of America and six foreign countries. The above 212 subscriptions total \$24,091 or an average of \$114 each. It is hoped by the secretary and

the committee-men that ere the second week of January is completed both the fifty-percent and \$25,000 marks will be passed. Incidentally it is interesting to note that at this writing we are three subscribers ahead of the 1912 Fund, when even the stimulus of only having recently completed our Technology courses netted but 209 subscribers for 1911.

~~Pray~~ The explanation as to why the class total has shrunk from 441 known addresses to 437 is made by adding the names of two more classmates of whose death the secretary has been advised by the mails, making four in all. William L. Roberts, XIII, a graduate, was killed in an automobile accident last September, while word comes from Italy of the death of Alberto M. Bombrini, II.

"Doc" Moore from Tyler, Texas, sent in a splendid note when forwarding his pledge and in it said:

"I will always try to be a loyal member of the class of 1911 and I look back on the days spent at Tech as among the happiest of my life. Will be glad to hear from you occasionally, if you find time to write, and ask that you give my best regards to any of the boys that may happen to remember me."

Paul Pearson, who is with the Boston & Maine Railroad in Concord, New Hampshire, sent a similar message of best regards to classmates, as did Theodore J. Lafreniere from Montreal, Canada. The latter is a graduate of the former Laval University in Montreal, recently damaged badly by fire and about to be rebuilt under the title of "Universite de Montreal."

"John Craig Watson" is now located in Munro Township, Mathewson Post Office, Ontario, Canada. He writes that he got away from the big mines in 1914 and went prospecting for gold on his lonesome. First he wasted a lot of money with worthless prospectors to learn the game so that recently he has been without a partner. His main prospecting has been for gold around Porcupine and Munro. In 1915 he got hold of a good property in Munro and during the four ensuing years has been so busy fighting law suits to defend his property that he did not have money enough to find out what they actually contained. In the case of two of his claims in Munro a party tried to jump them but was unsuccessful. He recently visited some of his claims and found that a forest fire had so cleaned the ground that the rocks were as bald as a man's bald head and as a result, a vein was exposed 4 feet wide and 250 feet long showing assays rendering from \$7 to \$67 in a pay streak. This vein is apparently a contact vein and Watson considers it of much promise. He has 200 acres of ground and expects to be very busy next year raising money and developing the property.

For topping off these notes your secretary knows of no better way than to attach herewith, verbatim, the latest effulgence of humor from our genial master manipulator of the cow's husband, yclept James Francis Duffy, the same being a letter—Subject, Loyalty—dictated from the Buffalo plant of the Curtiss Aeroplane and Motor Corporation. Read on:

Subject: Loyalty

"Dear Dennie:

"Enclosed you will find the original post card filled out so long ago that the blue ink has become black, but unfortunately held until I could get the time to pen the appropriate accompanying missive. I'll admit it was pretty mean of me to keep you hard working fellows in suspense so long but I'm sure that this unexpected receipt of something you were sure you were not going to get will make your Christmas so much more pleasant that your travail (Ooh, La La, Wee Wee) will be forgotten.

"As I told you my mind was made up immediately and the card filled out but I came very near cancelling everything. I can appreciate the honest endeavors of a hard working committee to accomplish a given task but there is a limit to the honorable means which can be applied to obtain results. I do not believe any cause is sufficiently worthy to warrant the use of blackmail and when an individual who has always been a close friend—so close in fact, that his knowledge of my personal habits was so intimate that he knew I had never indulged in the use of liquor, and when in addition to this the country had gone dry and the old liquid sunshine was more inaccessible than ever—then when such a one begins sending to your home communications, the envelope of which outdoes the *American Eagle in Screeching Dry Cure*—why Dennie that's blackmail!!!

"I can appreciate the effectiveness of such literature coming from our old friend Gus because anything efficacious enough to cure that boy would be potent enough to make a Sahara out of the Mississippi Valley. In spite of the element of blackmail the communications were interesting, for you know Charlie throws a wicked argument.

"I have received numerous communications from the General Committee, from the 1911 Committee, from yourself, from Gus, and even a card from some unknown which said 'You contributed to 1912—Why not now?' but last night the straw that broke the

camel's back was a letter which I received from the Aluminum Castings Company and I said "Wilson—That's all!" !!

"I have taken up with our management the matter of arrangements for the use of the facilities of the Institute but it is improbable that anything will be done as we have a splendidly equipped wind tunnel and laboratory of our own in our Garden City Plant.

"Give my regards to that hard working committee and also any others of the old crowd who may happen to drop in.

Sincerely,

Jim."

1912

RANDALL CREMER, *Secretary*, 7 The Circle, Rochelle Park, New Rochelle, N. Y.

F. J. SHEPARD, JR., *Assistant Secretary*, 568 East First Street, South Boston, Mass.

Due to the fact that Cremer has been called to Brazil for an indefinite stay, it was decided at the Class dinner held at the Engineers Club, on November 21, that it would be advisable to elect an assistant secretary who would be located in Boston.

After a secret ballot the above incumbent was sentenced. He needs help, so turn to and send in the news.

The Endowment Fund Committee attempted the first Class Dinner since the reunion, on November 21, at the Engineers Club. From some one hundred and fifty return post cards sent out, only about thirty-five came back, and of this number over half were refusals.

The dinner was decidedly a success, although only fifteen were there. Following custom, we had a round of the table and each man told what he was doing. A synopsis follows:

W. T. ROBERTS, I. Roberts started in with the Boston Elevated after graduation, but quickly realized that the road was going down hill, and left after one month's effort to stem the tide. He then went with the H. W. Johns-Manville Company, and has been with them ever since. His cards reads "Manager of the Refrigerating Machine Department." Roberts admits being married, but has no children.

JOHN W. RAYMOND, JR., I. Raymond was married a short time ago and was described in the press at the time as "The beaming bridegroom." Fortunately he is still beaming. Raymond started ploughing after graduation on his father's farm, but after half a day at it, decided that this was not his line. He then became City Engineer for the Municipality of Lynn, and stayed at it for six years. The high cost of living forced him to give up this easy job and he went with Professor H. K. Barrows as general utility man. Metcalf & Eddy, Sanitary Engineers of Boston, inveigled him into leaving Professor Barrows, and he is now with them. Raymond wanted to go on record that he had not been able to realize to any great extent upon the poker practice, at which he was so consistent, while at the Institute.

JOHN M. PETTINGELL, I. Pettingell acknowledged that this is his first public appearance since graduation, much to his shame. The lure of the mighty dollar started him off as a bond salesman. He later went with the Anaconda Copper Company of Montana for eighteen months. In United States Reclamation Service work for a short time and then with the Illinois Zinc Company on furnace and combustion work. During the war he enlisted in the Air Service and was commissioned a pilot at Ellington Field, later becoming an instructor in acrobatic flying there. He was sent across, but saw no active service. After the armistice he was in Paris for some time, and then in some way became convoy officer for a Motor Transport Unit. At this he traveled pretty much all over France. He is now with the Hammel Oil Burning Equipment Company located in Boston.

F. H. BUSBY, VI. Buss is a much married man, being the proud father of two girls, one four years, and the other two years eight months, respectively. He also qualifies as a man of general all round experience, as he is the master of eleven separate and distinct "jobs," viz., teaching, Stone & Webster, Northeastern College, concrete design, Fay Spofford and Thorndike, on the Boston Army Base; Insurance, C. H. Tenny Company; concrete design and several others. Busby wound up with quite an alluring sketch of "Utopia" for the Engineer.

DOC SLOANE, I. Went on a hydro-electric survey for the Knoxville Paper Company in North Carolina after graduation. Next on an asphalt paving job in New York City. Then with the Atlantic Gulf and Pacific Dredging Company. Engineers' office in Middlesex County, Mass. Next with the Underwriters' Insurance Bureau of New England, where he is at present. During the war Doc was in the Navy at the Curtis plant on Long Island,

where he personally supervised the construction of the NC-4, which afterwards got across to Europe. Doc was married on October 18, 1919, and emphatically states that he was no "blushing bridegroom." Doc gave a lengthy and complicated description as to the "get-a-way" after the wedding. All gave close attention, especially the married men, as of course there is always the hope of trying it a second time.

J. L. BARRY, VI. Link went out to Binghamton, New York, with the Dun McCarty Company, making shoes. As a laster he was good and made as high as \$1.50 a day. Six months of this, however, wore him down and he was forced to go up into Maine for the winter and try logging in an attempt to regain his broken health. He next went with the Waterbury Clock Company, Waterbury, Conn., and from there to the Scoville Manufacturing Company. Next as Assistant Works Manager at the National Conduit and Cable Company where he was located during the war. This plant was engaged at from 95 per cent to 98 per cent of its capacity on war work. Link is now at Taunton, Mass., with the Whittenton Hosiery Company as Treasurer and General Manager. Link is married and boasts two children.

F. J. SHEPARD, JR., VI. With the Sturtevant Company at Hyde Park for a year in the engineering department. Sales Engineer with the Exide Storage Battery Company for a year and a half, and since then with the Lewis-Shepard Company manufacturing and selling elevating hand trucks. During the war was commissioned as First Lieutenant in the Engineering Division Ordnance, safely located at Washington. Had a very interesting time fooling around with hand grenades and trench mortars of various sizes, and was commissioned a Captain. He is now back making trucks.

C. W. SOMERS, IV. With Stone & Webster as Field Engineer upon graduation. Then as resident engineer on various jobs. The jobs were elusive, however, and it necessitated eleven moves to stay with them. He wound up in charge of work on the Technology Buildings and has since been in Boston in charge of construction details on all work in this locality. He is married and has two children.

KENNETH ROBINSON, II. Assistant in the Mechanical Engineering Department, 1912-1913. Married in 1913 on June 25. He has since been an instructor in the mechanical engineering laboratory and boasts one boy, four years old. During the war Ken was instructor in each of the Government schools, that is, naval aviation, sub-marine chaser engineers, and merchant marine engineers.

C. E. MORROW, IV. Back at the Institute as assistant, 1912-1913, in the architectural Department. With W. W. Bosworth on Institute preliminary plans on the new Institute during the summer of 1913. 1913 and 1914 with Stone & Webster and part time on instruction at the Institute. 1914 with the Aberthaw Construction Company as resident engineer at Ansonia, Conn. From 1916 he has been chief draftsman for Stone & Webster, having charge of many of the large Government buildings, including Watertown Arsenal, and Picatinny Arsenal. He is married and has a daughter one year and a half old.

C. F. SPRINGALL, IV. With Kilham & Hopkins, then with Parker, Thomas & Rice until 1917 as outside superintendent in charge of construction. At the Naval Aviation School at the Institute, commissioned and sent to the Curtis Plant at Buffalo. Author of "Glossary of Naval Terms." Transferred to the Standard Aircraft Corporation plant in charge for the Navy Department. Promoted to Lieutenant, Junior grade. Released from the service in July, 1919. Springall is now working on a proposition to manufacture small houses on a quantity basis.

GEORGE B. BRIGHAM, JR., IV. Came back to the Institute for a fifth year and then secured a position at \$25.00 a week. After the first month his stipend was reduced to \$18 and Brigham admits that he thanked his lucky stars that the cut was not greater, as he found himself not to be the finished product that he imagined. With Monks & Johnson on the Victory Plant construction at Squantum and taught at the Students Army Training Corps at Tufts during the war. He is now at the Institute teaching in the architectural department. He was married in 1914 and has two daughters.

E. H. SCHELL, II. Professor Hayward advised Schell to keep his mouth shut for the first year after leaving the Institute. It could not be done and therefore the following sad statement of facts: With the Union Twist Drill Company at \$10.85 per week. Raised two cents per hour after the first month. It was too much and he left. With the American Locomotive Company at Providence. While here he rapidly rose in responsibility and within six months the plant completely closed down. He started drafting in New York City at \$15.00 a week and was fired for poor work. He was employed as industrial engineer at Fall River for some time. Then with the United States Cartridge Company, first on consulting work and later, entering their employ. He was married. He was Treasurer of the Henry F. Miller Piano Company, Boston, for six months. Accepted Instructorship in Business Management Course under Professor Dewey. During the war was at Hog

Island three days a week in consulting capacity and taught the remaining three days at the Institute. At Hog Island he managed to cut down the overhead of the plant some seven million a year. From all accounts there was a good opportunity for making some small saving. At the present time he is teaching business management part time and is doing engineering work under his own name the remainder.

E. C. HOLBROOK, I. Assistant in the civil engineer department for one year, then with the Union Carbide Company at Niagara Falls, and later with the Canadian plant at Sault Ste. Marie. Then with Stone & Webster, Boston. As instructor in the architectural department, Option II. At Plattsburg, commissioned and assigned to 104th Engineers, 29th Division. Was overseas and had a fine view of France from on foot. At the front in Alsace sector for three months and then moved down to the Meuse Arzonne offensive, where he was in the line for three weeks. Sent back for rest period and just ready to go in again at the signing of the armistice. Now with the Truscon Steel Company, Boston office. Married in September, 1917, later losing his wife. He has one son.

RUBE DOBLE, II. "Wet Option" (since discontinued). With the Pneumatic Scale Company after graduation. Married and has one son, having lost a daughter. Entered the service and fought his way up from a buck private to first lieutenantcy in numerous branches of the service. While in the service his wife died. He has now gone into business for himself at the Waterproof Paper Manufacturing Company.

A. W. Reed, I, writes in as follows:

Otsego, Mich.

"The last of September I accepted a position with the Fargo Engineering Company of Jackson, Mich., as resident engineer on the construction of a small hydraulic power house near here. This work will probably be completed in January. I do not know whether I will then take up something else with the same firm. I want, if possible, to locate for a year or two on some really large construction job of the same nature.

"Meanwhile I am occupying with my wife a small apartment in this little town of five thousand or so. We are fairly comfortably fixed here, and what is quite important, find living expenses comparatively very reasonable.

"Perhaps you would like to hear a word about my military service. I was commissioned a First Lieutenant in Field Artillery at the second training camp, went to the 16th Field Artillery and early in the spring of 1918 was assigned to Headquarters 4th Field Artillery Brigade, 4th Division, where I had charge of the telephone and radio work. I was abroad from the middle of May, 1918, until the last of June, 1919, remaining with the same organization. Was promoted to a captaincy in September, 1918. I haven't any very thrilling stories to tell, even if I wanted to, so don't be alarmed; but I was lucky enough to get up where I could smell a little gas and hear the fragments from a few big ones whiz about my ears, and now that it is all over, am glad I was there."

Word from Rudolph H. Fox, II, states that he is now District Manager in Detroit for the Gurney Ball Bearing Company. He writes as follows:

"Am District Manager out here for the above company (Gurney Ball Bearing Company) and altho the work is interesting I cannot hand Detroit much as a place to live. The automobile boom has been so furious that the town hasn't found itself and is like a huge village. The population is now over a million. Blake was out here for a ten days' visit last month and we had an interesting time—hadn't seen him in eighteen months. He returned from overseas in June, after ending his experiences over there with three months at Cambridge, reading law. I'm taking it for granted that you remember him.

"Allen Willard is in Otsego, Mich. (with his wife), located there on hydro-electric development work as resident engineer. If I find his letter I'll enclose it. Saw quite a bit of the United States before locating here, New Orleans, Roosevelt Dam, Grand Canyon, Canadian Rockies and California. It was a great trip.

"Lynch was located in Frisco, in charge of office of Aluminum Company of America there, having just taken up his work when I saw him and his wife. His predecessor was a lad I knew in Hartford.

"Hope to get back East eventually, for I want to locate there. Saw Arch Eicher and Rosby in Cleveland in June. Are there any 1912 men in Detroit? Am on local fund committee but I have found none. Pretty fine of Frick to leave us \$5,000,000. May be he's 'Smith'."

O. C. LOMBARD, VI., has left the New England Telephone & Telegraph, where he has been in the engineering department for the past five years and has gone to Epsom, New Hampshire, where he is engaged in a general trading business as proprietor of the "village store." His line includes everything from toothpicks to a ton of coal, with dry mash for your hens included. When in need of anything, drop him a line.

JOHNNIE LENNARTS, VI, is with the Harry M. Hope Engineering Company at 185

Devonshire Street, Boston, home address No. 87 Barnard Avenue, Watertown, Mass. Johnnie's engineering experience in developing the "dancing darkies" and the "automatic dog" has stood him in good stead and he is now in charge of construction work of a two million dollar job in Connecticut.

From *The Evening Star*, Washington, D. C., November 4, 1919.—"Mr. and Mrs. Robert J. West of Boston announce the engagement of their youngest daughter, Edith Mae, to Lieutenant John Seely Grant of the U. S. N. R. F. During the world war Miss West spent about a year overseas doing war work, coming to Washington after the armistice was signed. Lieutenant Grant, who is a Boston man, a graduate of the Massachusetts Institute of Technology, is a civil engineer in the Navy, and is now stationed at the naval air station at Morehead City, N. C."

RALPH FERRY, II, is now with the Northern Aluminum Company, Ltd., as Superintendent of the Sterling Road plant, Toronto, Canada. Ferry has acted as Canadian representative for the class on the Endowment Fund drive.

JESSE HAKES, I, writes as follows from the Grove Park Inn, Asheville, N. C.: "I have been temporarily incapacitated by a nasal operation and have had to withdraw to the mountains for recuperation.

"I regret that I have been unable to have coöperated with you more fully in the matter of the Alumni Drive. I have forwarded my individual subscription to headquarters and regret that I cannot do more. Please look to me in the future whenever there is a chance to help the M. I. T."

A. F. ALLEN, XI, writes as follows from the office of the Public Health Service, Washington, D. C.: "In view of the fact that I am traveling all through the southern part of the country and have no permanent address, I give my old home address, Campello, Mass., as my mail address. Regret that I could not get up for the dinner, but the night of the twenty-first I spent in a railroad bunk car, where I had gone to investigate some reported cases of typhus fever, which were not typhus, by the way. I can assure you that I would much preferred to have been with you all at the dinner. A couple of excellent quail made up for the discomforts that followed during the night. I need not explain further. Your imagination can supply the missing data."

B. H. MORASH, VI, writes as follows from the office of the International General Electric, Schenectady, New York: "With reference to your December 5, letter, I am sorry to say that Mr. H. E. Dexter left here for China the middle of November and I would suggest that you write him, Care Andersen Meyer & Company, No. 1 Yuen Ming Yuen Road, Shanghai, China.

"I am sure that he inadvertently overlooked this call and that he would have quite willingly entered his pledge. I should say from the figures given in your letter that the average per man was quite satisfactory, but that the percentage of the class subscribing was rotten. I sincerely hope that someone will get a Stinger to work, and see if we cannot get a better response.

"I saw Brackett in New York Saturday and stopped with him over Sunday. He was the only one of the "twelve" bunch I have seen for some time. I expect to leave for India in about two months and at the present time it looks as if I was going to accept the position with another company, and if this works out, I will be in Boston later on for a few days and will look you up."

FRANK O. BALDWIN writes from 12 W. Gay Street, Richmond, Va., as follows:

"I have been in very poor health since a spell of influenza (during the epidemic.)"

"With my earning capacity jeopardized to some extent and the gloomy prospects of becoming an invalid, I am sure you will appreciate my position—my inability to help the old 'Stute.' In the event that I am 'above sod' a few months hence, and I am somewhat nearer normal, I may be able to help yet."

LIEUTENANT COMMANDER HUNSACKER, XIII, had a great deal to do in the design on the NC Navy boats, one of which, the NC-4, made the flight to Europe.

DAVID GUY is now with the United States Geological Survey, Washington, D. C.

J. H. CATHER, IV, returned to the Eastman Kodak Company, Rochester, after receiving a discharge from the Engineering Corps, U. S. A. He is now in charge of purchase of installation equipment for their new power house.

OUR CLASS SECRETARY, RANDALL CREMER, is now in Brazil on engineering work in the firm of Snare & Triest.

G. I. EDGERTON, IV. After attending the Naval Aviation School at the Institute was commissioned in the Naval Flying Corps, and stationed at Pensaco a. After receiving his discharge he was forced to submit to a serious operation and has been recuperating since. He is now "farming it" down in Maryland.

DAVID McGRATH, I, who is now assistant to the president of the Mobile Light

Railroad Company at Birmingham, Ala., was called to Boston recently by the death of his brother.

J. GERSHBERG, VI, is now with the Terry Steam Turbine Company located at Hartford, Conn. Gershberg was with the General Electric Company of Lynn before going to Hartford.

PETE WHITTLESEY, II, is still with the Walworth Company and is now located at their Philadelphia office.

DAVE BENBOW, after receiving his discharge as Captain in the Ordnance, U. S. A., has gone back to his old job selling "baby shoes." Ben is not married yet, but his headquarters are still in Reading, so there is hope.

C. A. DUYSER, XI, during the war was with the Westinghouse Church Kerr Co., located at the Air Nitrates Plant, Mussels Shoals. He is now at Middleton, Conn.

In connection with the drive for contributions to Technology's Endowment Fund, H. E. Kebbon, chairman of the 1912 Class Committee in New York, sent out notices to all members of the class in the vicinity of New York, urging them to be present at a class dinner arranged for Wednesday evening, December 17th, at the Technology Club.

The response was not gratifying and only the following faithfuls appeared: Dick Scanlon, L. A. Matthews, Fred Barker, Vincent Gallagher, F. J. Osborne, John Hall, H. E. Kebbon.

Dinner was served in the Stein Room of the club and many incidents of undergraduate life were discussed and of experiences since graduating, particularly during the years of the war.

George Gibbs joined us after dinner and gave an outline of the progress of the fund campaign and explained the details of the contract plan with industrial concerns.

Keb read a telegram received from headquarters in Boston, giving the latest subscription figure for the class, and at that time only 33½% had subscribed the sum of \$21,000. Since that date these figures have been raised to a total number subscribing of 49% with a total subscription of \$27,356, which is greater than the amount raised by either 1911 or 1913.

Dick Scanlon is leaving New York to continue his shipbuilding activities in Baltimore, Md.

Fred Barker has recently come to New York for permanent residence.

Keb is now associated in business with Welles Bosworth, architect, and the concern is among other projects preparing plans for a large extension to the Telephone and Telegraph Building in this city.

John Hall is still doing excellent work safeguarding the health of the inhabitants of New Jersey.

1913

F. D. MURDOCK, *Secretary*, Eggertsville, N. Y.

On October 26, William F. Black, III, was married to Miss Miriam Stevens at Arlington, Mass.

Max Harrington, XI, was one of the last to return from abroad, and is now with Hungerford & Terry, Incorporated, as a salesman calling on textile concerns, covering the territory from Utica to Springfield.

Last July Tom Lough, I, got mixed up with an automobile and had both of his legs broken. When we heard from him in December he was still unable to walk, and did not know what the final outcome of the accident would be. We are mighty sorry for your accident, Tom, and certainly wish that you have the very finest recovery possible. W. C. Purdy is with the United States Public Health Service, working around Chico, Calif. After nearly three years' isolation in Keokuk, Iowa, Albion Davis, I, made a trip back to civilization in October. He spent some time in Boston, and also several places in the east where large hydroelectric plants are located.

Don Van Deusen, II, is town recorder, "by-gosh," of Hudson, N. Y. He was elected by 523 majority. Don announced his engagement in October. R. T. Portal, VI, is salesman with the A. G. Wilson Company.

"Twink" Starr, I, is located in Cincinnati. Everett St. John, VI, has recently begun work with the American Telephone and Telegraph Company in the Department of Development and Research.

R. L. Thomas, VI, is in charge of the Efficiency and Output Department of the

Pennsylvania Water and Power Company at Baltimore, Md. Paul Cogan, II, is located in Bethlehem, Pa.

Bob Weeks, VI, is in the office of the general store keeper of the Pennsylvania Railroad at Philadelphia, Pa.

It is with deep regret that we announce the death of our classmate, Edward D. Donald, on June 26, 1918.

Mr. and Mrs. Allan Griggs Waite announce the birth of their son, Allan Griggs Waite, Jr., on Tuesday, December 9, 1919.

Harry D. Peck, II, head of the machinery department of the United Shoe Machinery Company, has accepted a position as superintendent of the Messberg Steel Corporation of Attleboro and will begin his duties there next week. Although a young man, Mr. Peck is one of the best known men employed by the company. He began work for the company when he was sent to South America. He went to San Paulo, Rio Janerio and Buenos Ayres. Returning to this country he attended Chauncy Hall School, Boston, where he took a course of study to fit him for the Massachusetts Institute of Technology. He also took a course at Bryant & Stratton, Boston. He graduated from the Institute in 1913 with the degree of Mechanical Engineer, after which he was employed by the Bemis Bag Company of St. Louis, serving as traveling auditor.

Mr. Peck traveled all over the country from Boston to San Francisco and from Winnipeg to New Orleans while employed by the company. He then became head of the accounting department of the United Shoe Machinery Company and was soon promoted to the head of the store and stock department. He entered the aviation service of the United States army July, 1917, as lieutenant and came home a captain at the close of the war. Re-entering the employ of the United Shoe Machinery Company, he was placed in charge of the machinery department.

Mr. Peck was marshal of his class at the celebration of Massachusetts Institute of Technology in 1916. He is one of the most prominent members of Herbert Akroyd post of the American Legion, of which he is war risk insurance officer.

The engagement of Miss Ayame Marion Knapp to Allen F. Brewer, III, of West Orange, N. J., has been announced. Mr. Brewer served his country in the recent war as ensign in the United States Naval Reserve. After demobilization, he became connected with the Texaco Oil Company of New York. While at Tech Mr. Brewer was active in editorial work on the college press and since his graduation his short articles and poems have appeared in leading papers and magazines of New York. The marriage of Miss Knapp to Mr. Brewer will take place in June, after her graduation from her training course at the Newton Hospital.

1914

H. B. RICHMOND, *Secretary*, 12 George Street, Medford, Mass.

G. K. PERLEY, *Assistant Secretary*, Hillside Terrace, Belmont, Mass.

Fall is the season of campaigns. We usually think of these campaigns as political but not so with those which 1914 has been carrying on. The first drive was to bring the class records up to date, then came the drive to have all 1914 men members of the Alumni Association, and finally to have every 1914 Alumni Association member a subscriber to the REVIEW. The class secretary has been co-operating also with the Editor of the Technology War Record in his endeavor to receive a reply from every 1914 man. As a fitting climax to this work came the Educational Endowment Fund Drive. The secretary acted as chairman for the 1914 class committee. He was assisted by G. K. Perley covering Massachusetts and by A. C. Dorrance covering the remainder of the United States. Under Perley and Dorrance were the local and regional solicitors. Les Snow and J. W. Hines showed considerable action in lining up the 1914 men in New York City. "How" Taylor greatly assisted the work in the Middle West by taking hold in his customary cordial, enthusiastic manner. The results of this campaign have been published so frequently that nothing further will be said about it here. It was very discouraging however, when the campaign was nearly finished, to receive a report that, of all classes between 1923 and 1888, our class, with one exception, was at the bottom of the list with respect to amount contributed. The general response to questionnaires sent out by the Alumni Office and the Technology War Record was not a credit to 1914. It takes three to four requests to get a satisfactory reply out of 1914. *Let us shake off our inertia and show some action.* The Alumni Association will remember us by what we do, not by what we intend to do.

The social event of the fall was a class dinner held in the Grill Room of the Walker Memorial on Saturday evening, November first. Thirty Fourteeners were present. As there were so many matters to be taken up, no outside speakers were present. Each man present, however, told briefly what he had been doing since he left the Institute. For variety of occupations 1914 could well claim high honors. Buck Dorrance announced that prior to the war he was making soup but now he is canning fish. He also suggested that it would be possible for him to continue through the menu to the ice cream business, but that he hoped to stop before he arrived at a nut factory. The principal talk of the evening was by Art Stubbs. Art is assistant director of the Endowment Fund Campaign. He explained why the Endowment Fund was necessary and what 1914 was expected to do. The principal business of the evening consisted in electing an assistant secretary to fill the place of Skip Dawson whose business interests forced him to resign from that office. G. K. Perley was elected to fill the vacancy.

Word has been received from the Alumni Office of the death of J. G. Sada, III, who died sometime during 1918. As yet no further details have been received.

The letters which have been coming in to the secretary indicate that most of the men are getting settled after their war experiences. In not a few cases they are making sure this time by taking a life partner to assist them. One of these men is E. L. O. Patten, II. Bob returned from France in the spring and on October twenty-eighth married Miss Madeline Kneeland of Lincoln, Maine. Bob was formerly at Lincoln with the Katahdin Pulp and Paper Co. as mechanical superintendent. Now he is mechanical engineer with the National Carbon Co. at Cleveland, Ohio.

Mr. and Mrs. George H. Breed of Lynn, Mass., have announced the marriage of their daughter, Edith Sutton Breed, to Harold Warren, II, of Swampscott on October twenty-first. Warren is a mechanical engineer with the United Shoe Machinery Co. at Beverly, Mass.

Will wonders never cease! After a decade at the 'Stute—old and new—Dean Fales, II, has broken away. We find him at large operating under the title of Director of Education, Motor Transport Training Schools, Baltimore, Md. We have heard that Dean has succeeded in getting a lot of important work under way which will have a very decided bearing on the future of the army. In a letter announcing his retirement from the Institute Dean wrote "Tell the gang that 'life ain't what it used to be' when the Westminster was a way station between Eng. A. and Rogers. Also tell 'em that the pigeons did come over to the new buildings."

Lyman S. Baird, II, has moved to Detroit and is production manager for the Sunnyside Electric Co., a division of the General Motors Corporation. The company is manufacturing a new farm lighting outfit which Baird assures us is to be a knockout.

Robert V. Townend, X, is a research chemist for the Solvay Process Co. at Syracuse, N. Y. During the war Bob was with the company, engaged in the manufacture of explosives. At the present time he has charge of an organic research laboratory and supervision of the chemical work in the benzaldehyde and benzoic acid plants. Bob was married nearly four years ago and to convince himself that he has really settled down he recently bought a house in Syracuse.

O. E. Conklin, VIII, is doing excellent work as a physicist for the DuPont Co. at Parlin, N. Y.

L. R. Abbott, VI, has forsaken the beaten paths and has gone in business for himself as an orange grower at Whittier, Calif. Abbott is one of our number who has resigned from the bachelors' club. He was married on the twelfth of last February to Miss Beatrice C. Seiler.

T. J. Duffield, XI, is in France with the Rockefeller Foundation. Tom expects to remain abroad for about two years.

N. E. Brooks, II, is in New York City as local manager for the Wyoming Shovel Works. Brooks sent a picture of his two and a half year old son. With the picture was a challenge for any one in 1914 to produce a youngster equal to his. While the competition would be pretty keen if we started a baby contest the secretary will say that Brooks has an excellent chance for the laurels.

C. H. Ober, I, is exploring the wilds of South America. Chet's official capacity is topographer, hydrographer and astronomer for the Dr. A. Hamilton Rice Expedition to Brazil, Venezuela, and Colombia. The expedition will explore the Amazon, Negro, Orinoco and some of the smaller streams. Chet writes that he hopes to be back in the States by next summer. Before leaving for South America he was in command of the U. S. S. Hydrographer making surveys of the Florida Reefs and the Marquesas Keys. In July 1919 the engagement of Miss Pauline A. Stevens of Newport, R. I. to C. H. Ober was announced.

Newell A. Thompson, V, was in Boston recently for a brief stay. Thompson was home on a visit from China where he is employed by the Standard Oil Co. of New York at Shanghai. On his trip from China he stopped off at Australia which is the native land of Mrs. Thompson.

J. E. Martsoff, IV, is in business for himself as an architect in New Brighton, Pennsylvania.

We have received a card from A. H. Waitt, V, announcing the fact that he has become associated with E. M. Hamlin & Co. in their general investment and banking business at Boston. Waitt has also written that he is in a position to recommend excellent investments for any 1914 men who have some money which they would like to put away at a good interest rate with 100% safety. Good luck to you, Alden. I hope that you find it easier to take money away from the Class than the Secretary did during the Endowment Fund Drive. Just keep at them, they always come around strong in the end.

C. H. Wilkins, II, is assistant manager of the Wilkins Paper Box Co. at Boston.

R. W. Moorehouse, X, is a chemical engineer with the Barrett Manufacturing Co. at Frankford, Penn. D. F. Gould, X, is a research chemist with the same company. No wonder the Barrett Company is making money with this pair to furnish the brains.

A. F. Graham, Jr., is with the Dodge Engineering Co. at South Boston as a mechanical engineer of tractors. During the war he was assistant secretary and traffic manager of the Sturtevant Aeroplane Co. at Jamaica Plain, Mass. Among his other titles Graham holds the rating of the United States Government as Aeronautical Mechanical Engineer.

It is always a pleasure to receive a letter from J. A. Judge, VI, who is superintendent of the Highland Manufacturing Co. at Holyoke, Mass. Jimmy sure does knock the blue spots sky high. Just as the Endowment Fund is dragging, along comes J. A. with the largest contribution 1914 had received to date. Along with the pledge card was a letter that would have done Mark Twain credit. The intelligence department of Holyoke report that Jimmy is riding around in a new Oakland sedan, that he has been seen adorning a certain parlor rather frequently, and finally that he stopped in front of a jeweler's window the other day. Of course these may all be just signs, but knowing the judge the way we do, we can expect there is some reason besides Postum.

F. P. Karns, II, is general manager of S. T. Karns Sons Co., at Franklin, Penn. Freddy is still single, but just as active as ever. This latter fact was very evident during the Endowment Fund campaign.

V. M. F. Tallman, VI, objects to the statement in the November REVIEW that he is still with the Worcester Electric Light Co. V.M.F said that he is neither still nor still with the company. Instead he has been hustling for the last five and a half years and on January first will transfer his affections to the C. H. Tenney Co. of Boston. Five and a half years is a pretty long time for a Course VI man to stay in one town without having the sheriff invite him out. Welcome back to Boston! The old cops are gone so that you will start with a clean record when you come back.

E. E. Dawson, II, and N. D. MacLeod, II, are with the Abrasive Machine Tool Co. at East Providence, R. I. Mac is vice-president and Skip takes occasional trips around the country. Neither of them are married yet, although Skip has hopes, according to his questionnaire.

Among our other members who have risen to a vice-presidency is R. C. Goeth, IV. Ralph is vice-president and manager of the machinery department of the Walter Tips Co. at Austin, Texas. He is also one of the ancient benedicts of the class, having been married over three years.

F. C. Cleverley, XIII, is a travelling inspector for the U. S. Shipping Board at Houston, Texas. In one of his interesting letters he wrote:

"I wonder if any Fourteeners or any other eener has been more of a hobo since leaving Tech. Oiler, coal-passer, fireman, sailor on a four-mast bark, stowaway, prisoner, in jail twice, engineer, stenographer, hobo and more or less respectable traveller, and executive in offices, have been some of my jobs since leaving my books at Tech. And I have not stopped yet!"

If any one else has a record which can approach Cleverley's, let him speak up.

Maynard Griffith, IX, is another man who has had no small travel record. He writes that for three years he was absent on a trip to Alaska and other remote parts of the world just at present he is Second Officer on the Admiral liner "President."

The Fourteeners around Boston cannot fail to have noticed the very attractive double front electrical supply house at 130 Federal Street. Over the door is the name "Beaudette & Graham Co." The Beaudette is none other than our own Joe Beaudette of Course VI. Although the company has only been formed for about three years it already enjoys one of the largest trades of a house of its kind in Boston. A tip to Fourteeners. Go around

and see the excellent display which Joe has, but do not take your wife. He will sell her a washing machine, a couple of electric irons, a curling iron, and no end of lamps if you do not watch him.

Another Fourteener who is in business for himself is E. M. Boyd, II. Boyd is senior partner of the firm of Boyd & Malmstrom, builders and contractors at Newton Centre, Mass.

After spending five years in Calcutta, India, with the Angus Co. as general engineer, Percy McCullough, VI, has returned to his home in Weston, Mass. Mac started out on his venture alone but returned with a wife and year-old daughter.

E. W. Bowler, XI, enjoys the title of investigator for the U. S. Industrial Alcohol Co. Bowler calls our attention to the word Industrial in his company's name. During the past summer Bowler was an instructor at the Junior Plattsburg camp. Equitation and Cavalry Drill were his specialties. Before he entered the war as a lieutenant of engineers Bowler was at M. I. T. doing research work on how far a street car should run for a nickel. He still admits that the war was one of the greatest blessings that ever happened to him. Never again on the research stuff is his present motto.

After a varied career as sewer rat in New York City—title furnished by himself—and as captain of engineers in the regular army, H. G. Borden, I, has settled down to the safe and sane position of power plant engineer for John A. Stevens at Lowell, Mass. Borden still keeps his pockets filled with various useless gadgets such as circular slide rules, etc.

P. E. Morrill, I, writes that he is official seat warmer in the Engineering Department of Bemis Brothers Bag Co. at St. Louis. He further goes on to explain, however, that after the seat is warm he keeps busy at factory methods, production, costs, personnel problems, etc., all very interesting and something new every day. Aside from these arduous duties Phil has nothing to do but stay at home with his wife and eighteen months old daughter.

D. H. N. Mayo, II, is the official 1914 representative with the Ford Motor Co. at Detroit. Mayo is a mechanical engineer and, unlike most of the other 1914 mechanicals, is still single.

D. G. Crowell, X, is in the lumber business with his father at Somerville, Mass. Don is still on the single list, much to our great surprise.

H. V. Fay, IV, when last heard from was still with the army in Vladivostock, Siberia. Fay is a captain in the 319th Engineers, and was working with the Intelligence Section of the staff.

Any Fourteener out of a job should apply to A. N. Henrickson, II, who is employment manager for the Holtzer-Cabot Electric Co. at Roxbury, Mass. Henrickson says that he can use a few office boys. We also note that on his questionnaire he wrote after "Date of Marriage," "Undecided as yet." Apparently he has hopes.

H. L. Stone, I, is with Hunter & Havens, in the iron and steel business at Bridgeport, Conn. Peb is the very proud father of Howard Lyons Stone, Jr., who has just passed his first birthday.

Active among the Fourteeners in the rubber business, at Akron, Ohio, is W. P. Keith, X. Walt is in the Development Department of the Goodyear Tire & Rubber Co. He has also joined the benedicts' class.

G. A. Wagner, VI, is another Course VI man who has gone into the electrical business for himself. He has a nice contracting business at Stafford Springs, Conn. Honus has also a couple of husky youngsters who are fast getting filled with M. I. T. spirit.

The next issue of the REVIEW will appear in April. In that issue will be the preliminary plans for the grand All Technology Reunion of next June. Is 1914 going to take part? You just bet we are! Now that it has been unanimously decided that we will be there with bells on, let each man get busy and make his arrangements to come. Remember that the secretary cannot write each man a personal letter and invite him to come. If you have any plans or suggestions as to what 1914 can do or should do, write the secretary NOW. The secretary is already getting bald and thin trying to think up new ideas and ways and means to make 1914 the leading alumni class. We have got started now, let's keep moving, or as Admiral Farragut said to Captain Drayton, "D—N the torpedoes, FULL SPEED AHEAD."

NEW ADDRESSES

The following list of addresses represent replies to the class questionnaire received since the list published in the November issue of the REVIEW.

L. R. Abbott, VI, Whittier, Cal.; N. E. Brooks, II, Wyoming Shovel Works, 139 Centre St., New York City; H. S. Busby, XIII, 12 Pearl St., South Manchester, Conn.; H. M. Campbell, VII, 4301 Ashland Avenue, Norwood, Ohio; O. C. Clisham, X, 407

Centre St., Solvay, N. Y.; W. S. Conner, III, care of Braden Copper Co., Rancagua, Chile, South America; A. Crankshaw, X, 479 Franklin Ave., Palmerton, Pa.; E. E. Dawson, II, care of The Abrasive Machine Tool Co., East Providence, R. I.; T. J. Duffield, XI, care of Rockefeller Foundation, 12 Rue Boissy, Paris, France; L. T. Forbes, VI, 96 Franklin St., Framingham, Mass.; A. E. Hanson, VI, Bureau of Standards, Washington, D. C.; M. Harrison, VI, 300 South Washington St., Winchester, Va.; A. D. Hiller, XI, Statistical Section, Medical Div., Bureau of War Risk Ins., Washington, D. C.; J. T. Holmes, VI, 4217 Fourth St., San Diego, Cal.; F. H. Leslie, II, 595 Ellicott Sq., Buffalo, N. Y.; K. C. Mason, 76 School St., Brockton, Mass.; C. H. Ober, I, Care of U. S. Coast & Geodetic Survey, Washington, D. C.; P. B. Owen, VI, care of Farmers Loan & Trust Co., 22 William St., New York City; M. Paris, IV, care of R. H. Ward & Co., Inc., Bridgeport, Conn.; J. A. Root, IV, care of Cram & Ferguson, 15 Beacon St., Boston, Mass.; N. A. Thompson, Jr., V., Care of Standard Oil Co. of N. Y., Shanghai, North China; A. L. Todd, XIII, care of Standard Oil Co. of N. Y., Hongkong, China; L. A. Wilson, XIV, 478 Columbia Ave., Palmerton, Penna.; G. B. Zimmelle, VII, 55 Hanson Place, Brooklyn, N. Y.

L. S. Baird, II, 160 West Euclid Avenue, Detroit, Mich.; R. D. Bates, XI, U. S. P. H. S. Hospital, Greenville, S. C.; E. W. Bowler, XI, 32 Bullard Street, Dedham, Mass.; C. H. Chatfield, II, 1705 Q Street, N. W., Washington, D. C.; F. P. Gilbert, XI, 17 Stuyvesant Ave., Lyndhurst, N. J.; A. J. Hahn, VI, 217 North Bellevue Boulevard, Memphis, Tenn.; C. S. Lee, III, P. O. Box 1308, McGill, Nevada; R. M. Linnell, XIV, 6 Sunnymead Terrace, Brighton, Mass.; R. D. McCart, IV, 1223 Vermont Avenue, N. W., Washington, D. C.; W. L. McPherrin, II, 717 Gholson Avenue, Cincinnati, Ohio; J. R. Masferrer, II, P. O. Box 410, Havana, Cuba; R. E. Merry, I, 70 Glenville Ave., Allston, Mass.; R. Parsons, VII, 106 Franklin Street, Lynn, Mass.; E. L. O. Patten, II, 1487 West 117th Street, Cleveland, Ohio; G. K. Perley, VI, Hillside Terrace, Belmont, Mass.; H. R. Russell, Room 616, 137 South La Salle Street, Chicago, Ill.; C. K. Springfield, I, Room 200, Crowds Bldg., 1012 Main Street, Fort Worth, Tex.; S. W. Stanyan, VI, 70 Merriman Street, Akron, Ohio; V. M. F. Tallman, care of C. H. Tenney & Co., 201 Devonshire Street, Boston, Mass.; R. V. Townend, X, 131 Buckingham Avenue, Syracuse, N. Y.; H. W. Treat, II, 3704 Hawthorne Avenue, Omaha, Neb.; R. H. Tuttle, II, 4650 Fremont Avenue South, Minneapolis, Minn.; H. Warren, II, Suite 11, The Biltmore, Lynn, Mass.

 1915

WILLIAM B. SPENCER, *Secretary*, 527 North Grove Street, East Orange, N. J.

FRANCIS P. SCULLY, *Assistant Secretary*, 5 Exeter Park., Cambridge, Mass.

Committees are working on the arrangements for 1915's big five-year reunion in June. The plans must coincide with those of the Alumni in so far as the Alumni Reunion is concerned. Definite announcements as to dates, etc., will be made shortly. But do not forget to start your plans now. Go at once to the boss and tell him he must give you your vacation in June. 1915 is a most fortunate class to get two big reunions all for the price of one. Keep talking reunion to every 1915 man you know. There will be more excitement than you ever heard tell of before.

"Dave" Hughes has been chairman of 1915's Endowment Committee in New York City district. "Dave" has resumed his position with the Westinghouse Lamp Co., in Bloomfield, N. J. His address is Technology Club, 17 Gramercy Park, New York City.

St. E. Tower Piza is engaged in the real estate business with his father in New York City.

E. R. Brigham who has held the position of district sales manager for the Henry Weiss Manufacturing Company, in the eastern district has moved to Atchison, Kansas, to become sales manager in the home office of the company.

Henry F. Daley is with the B. F. Sturtevant Co., Boston, Mass. He is handling their line of fuel economizers.

George Urquhart has joined the New York 1915 gang. He is working for Wheeler & Woodruff, chemical engineers at 280 Madison Avenue, New York City. George's home address is 386 Park Avenue, East Orange, N. J.

Marvin J. Dodd, is living in Newark, N. J., where he is employed as efficiency engineer in the chocolate factory owned by his father.

Walter M. Africa has recently gone to Pittsburgh, Pa., with the H. Koppers Company, manufacturers of by-product coke ovens.

C. Loring Hall, I, in the Boston office of the Westinghouse Electric and Manufacturing Company spent a couple of weeks in Pittsburgh in December getting a line on a new gasoline generator unit for farm use. Is Charlie going to try to "Keep Them Down on the Farm after they've seen Patee?"

Fred I. Vogel is now in Pittsburgh with the Westinghouse Electric and Manufacturing Company.

Evers Burtner, XIII, since his graduation in 1915 has been lecturing at Tech on naval architecture and marine engineering. He holds, besides, the important position of port engineer for the John S. Emery Steamship Company of Boston; is official yacht measurer for the Eastern Yacht Club, Corinthian Yacht Club and the Boston Yacht Club; and is editor of the Question and Answer department of the "Marine Engineering Magazine" of New York City.

West Roxbury may be a fine place in which to live but hunting unknown addresses of 1915 men about ten-thirty on a cold winter's evening is not exactly a pastime. To collect the ten dollars which the evening's work brought forth required just five gallons of gasoline, one quart of oil (no other kind of quartz) three good men and miscellaneous wear and tear on tires and city directories. But every little bit helped and as we had to make the two hundred and fifty subscriptions and twenty thousand dollars we had pledged as our quota there was nothing to do but to chase the procrastinators to their homes. The game was worth the trouble and even if the money had not been raised the class spirit which has been aroused would have repaid the efforts of those who gave their time. The detailed statistics of the contributions of 1915 men will be given in a late issue, when the records hastily made up have been confirmed. In this connection the thanks of the class are due to C. L. Hall and H. C. Thomas both of whom worked untiringly to make 1915's efforts a success, and to a lesser degree to all our other classmates who gave their time and services freely. Those who received postal cards from Harvard will testify to efficacy of this method.

To those of us who were out of touch with Technology and class affairs the news of Homer Rogers' death from influenza last February 2 comes as a shock. At that time he was with the DuPont Company and had patented a process of producing a sterilizer for smokeless powders, the rights to which the DuPont Company on his death turned over to his wife. It is an inspiration to 1915 to know that Mrs. Rogers, desiring to do as she knew Homer would have done, contributed to the endowment fund. The sympathy of the class goes out to Mrs. Rogers who not only lost her husband but also her infant son, David, born two weeks after Homer's death and who lived only three days.

R. B. Stringfield, X, writes from Los Angeles, "Get to see Brute Crowell, IV, and Francis Boynton, VI, once in a while. Boynton is getting a nice little engineering business started for himself and Crowell is engineer on the new California Hotel construction, one of the Lennard chain. Elwin Norberg, IV, is also in Los Angeles but haven't seen him for some time. I'm keeping plenty busy putting up a charcoal plant for the California Walnut Growers' Association and working on orange oil and other by-products of the citrus industry for several clients. Los Angeles is not what you would call a big chemical center yet, but is becoming one fairly rapidly. Francis Boynton is in the firm of Whiting & Boynton, Civil and Electrical Contractors, his letterhead shows, and the best words in his letter were "As far as my own personal subscription goes I am going to ask you to treble it." There must be some money out in that part of the world.

Gaetano Marconi, the math shark from Course I, writes from West Haven, Conn., "Though I have had considerable success in business, I am just getting started financially. I got married this year and am trying to start my own little home as squarely as I can. Henry Doust is working outside for us now." Marconi in a late letter states that Henry Doust is saving up to get married in the spring. Go to it Henry. May the Gods be propitious in these hard times.

1915 never lacked originality. Take this for instance from Canada:
Mr. H. C. Thomas,
Newton Highlands, Mass.

"Dear Sir: In view of the present high rate of exchange between Canada and the United States I should hardly feel justified in sending a contribution to the Endowment Fund at the present time, or in promising anything for the future until the exchange shall become more normal once more. Please don't think from this that I have lost interest in Tech or that I do not appreciate the training I received there, but this question of depreciated coinage is a very vital one with us up in Canada, and we are doing all that we can to level things up again.

"Wishing you every success in your campaign I am"

Jim Tobey, XI, our best little cheer leader writes from the National Headquarters of the Red Cross, "In reply to your ultimatum with tears in it I am enclosing check. I

wish I could come across more copiously but I have an offspring to pay for and support and a lot of Washington profiteering to cope with.

G. L. Schoefield, I, sends a check along from the Merchant Shipbuilding Corporation, Harriman, Penn. Mrs. Jennings, the mother of William Jennings, I, writes, "William has been in the wilds engineering but came home for Christmas and asked me to attend to the matter for him. I am enclosing a bond." The letter comes from Salt Lake, so Bill is around Utah somewhere, we presume.

Nelson Stone, I, writes from Syracuse, on the letterhead of Thompson & Binger, "It seems ages since I've seen anything of Tech. I feel like an outcast. Yesterday was the end of my first four months' work. Previous to that I spent two years in Field Artillery, out of which one and one half years were overseas. Verily I've forgotten what a slide rule looked like when I took up my interrupted career "as an engineer."

George Rooney, I, is with the Cooper Company, Messina, New York. He has joined the married men's club, taking the fatal step on last July 19. The girl in the case was Miss Mary Perry of Bridgeport, Conn. Another of our newlyweds in Allen Abrams, V, whose announcement states Miss Juanita Spyker of Lima, Ohio as the other party. They are at home at 764 Woodruff Place, Indianapolis.

Charles Norton, II, writes from Providence, R.I., that he is organizing a production planning department for the Revere Rubber Company. Henry Niemann has evidently settled down for, though we have no official announcement, he says in a letter from the Norfolk Navy Yard: "I have been extremely busy, right after my honeymoon it was getting settled and during the holidays I was one man in three left to carry on the work of ten, and the senior of the three at that. I have been so busy during the day that I had to carry my 'paper work' home at night.

Grenville Haslam, IV, writes from the St. Paul's School, Concord, New Hampshire. He has evidently joined the pedagogues.

Les Fletcher, II, is with the Providence Gas Company, and has John Dalton, X, for company. Ban Johnson, II, is another '15 man who is located in Providence.

Ned Stelle, I, writes from the Minnesota State Highway Commission, Grand Rapids, Minnesota, "You see by the above address that I have travelled far and fast since I heard from you last, but have landed a good job in some of the best country in this section of the world. Have been out here since last March and like it ever so much. We are working on a big road-building program. The organization is a peach—about twenty engineers and I am principal assistant. There is not a thing about it all that is not fine and I wouldn't move back east for anything short of a fortune. The family are all just fine and enjoying some real cold weather—35 below this A.M. (Who said go west, young man, go west—shouldn't it be, go south)? Best regards to you all from us all and remember me to M.I.T. and our classmates."

From Weare Hewlett X, we hear, "I believe we have a reunion coming in June. Don't forget to keep me posted on all the dope. Kokomo is situated on the edge of 'no man's land,' but I am going to try to find my way out of the wilderness for the big time. Best regards to all."

Jerry Caldwell, VI, was in Boston working on the endowment fund for quite a while. He has now returned to New York.

Les Mase, I, phoned the other day that he had been up to Lancaster, N.H., for a few days, by gosh. He was enjoying the social life of Boston preparatory to returning to Dayton to resume flying at McCook Field. If any of our classmates are in that part of the world we suggest they look up Les, who admits he can fly just about anything.

Henry Shields, I, announces the arrival of a daughter while we understand that the family of L. H. Bailey, X, received an addition on October 21.

Fritz Blomquist is working at the Armor Plate Plant at South Charleston. Ned Cooper, I, who was one of our star entertainers at summer camp is now located at Boston and in the tire business.

A. H. Anderson, I, is somewhere in South America. His contribution to the fund came through his mother.

Gus Caffery, I, has been married but the details are lacking. He is with the Corrugated Bar Company of Boston.

Les Segal, VI, has changed his name to Sears and is now located with the Lockwood Greene Company in Boston.

December 6 was the first official class gathering since before the war. Fifteen loyal men gathered at Walker Memorial and talked over the old days and plans for the future. We had a little larger representation at the dinner January 10, the following men being present: V. A. Jasionowski, with the First National Corporation in Boston: Waldo F. Pike, Fay, Spofford & Thorndike, Harold L. Colby, Donald Perin, with the Walker Vehicle Com-

pany, Boston, C. L. Hall, with the Westinghouse Electric Company, Boston, G. H. Warfield, Woonsocket, Thomas C. Pond, with the Asbestos Shingle Company (fathers, take notice), Francis E. Murphy, Dorchester, Howard C. Thomas, Lockwood Greene Company, Boston, Paul W. Weymouth, Cambridge, E. A. Teeson with the United States Rubber Company, New Haven, E. Burtner, Lynn, M. W. Coroles, Fairfield, Conn., N. S. Klenk with Charles T. Main Company, W. J. Rooney, Waltham, J. A. Kelleher, West Stoughton, J. A. Ball, with Holmes, Comstock & Westcott, John N. Dalton, Providence, R. P. Joslyn, Holliston, and the assistant secretary.

Charles A. Blodgett, X, and Charles Paine, II, are with the Eastern Manufacturing Company, Bangor, Maine. Ted Spear, X, is still up at the Oxford Paper Company, Rumford, Maine. R. H. Walcott, X, is with the Chemical Products Corporation, Ltd., Trenton, Ont., Canada. Herbert Turrell, VI, is with the Turrell Shoe Company, Seattle, Washington. Joe Livermore, I, is resident engineer for Lockwood Greene & Company on the New Departure Manufacturing Company work at Bristol, Conn. Sam Foss, I, is assistant to the general manager of the Housing Corporation. L. H. Chellman is with E. R. Worthington, C. E., of Dedham. Charles A. Calderara is with G. F. Shepard, Architect, Boston. It has been reported that Bill Smith, I, is a benedict. Official confirmation is lacking.

Start saving the pennies for the reunion.

1916

JAMES M. EVANS, *Secretary*, 1916 16th Street, N. W., Washington, D. C.

No report has been received from the secretary.

Circles of friends in widely scattered cities over the country from Massachusetts to Oklahoma will be interested in the marriage on Christmas day of Miss Louise Van Valkenburgh Pierce of Evanston, Ill., to Murray Philip Horwood, VII, of New York City. The ceremony took place at the home of the sister of the bride, Mrs. Edward C. Boynton, of Worcester, Rev. Edward C. Boynton of Worcester and Dr. Nehemiah Boynton, of Brooklyn, New York officiating. A family Christmas dinner followed the ceremony.

Miss Pierce was educated abroad and in 1918 entered the special studies in War Bacteriology under Professor W. T. Sedgwick at the Massachusetts Institute of Technology in preparation for work in Europe, but this plan was not carried out on account of the cessation of hostilities. Miss Pierce accepted the position of assistant secretary to the Oklahoma Tuberculosis Association.

Mr. Horwood is an instructor in Biology and Public Health at Technology. He was graduated by the College of the City of New York in 1913, with an M. S. from the Institute in 1916, and special courses in the Harvard-Technology School of Public Health. He has been an instructor at Wellesley College and the Boston University School of Medicine. He has made public health his specialty, and has conducted surveys of communities in Massachusetts, New Jersey and Oklahoma. He is a member of a number of scientific societies and is the author of a number of standard articles and reports. Mr. and Mrs. Horwood will make their residence in Boston.

The engagement of Miss Frances C. Read, daughter of Mrs. Edwin Read (Alice Clarke) of Lexington, has been announced to Mr. Harold Osgood Whitney, Technology, 1916, the son of Mr. and Mrs. Arthur Whitney (Minnetta Osgood) of The Elms, Watertown.

The groom-to-be is a former member of the United States naval reserve corps.

V. Enebuske, I, severed his connections with the Pittsburgh Des Moines Steel Company last fall and is now in the Pittsburgh office of the Foundation Company of New York.

Samuel W. Ellsworth, XI, formerly with the Massachusetts State Department of Health before the war, is now connected with Morris Knowles, 1891, Incorporated, Engineers of Pittsburgh.

Mr. Marquay, I, is now connected with the Pittsburgh Des Moines Steel Company of Pittsburgh, Pa.

G. W. Onsler, VI, is now with the Duquesne Light Company of Pittsburgh.

Mrs. Samuel Benton Emery announces the marriage of her granddaughter, Adele Kimball to Mr. Harold Parker Gray, on Thursday, December the fourth, nineteen hundred and nineteen, Melrose, Massachusetts.

H. B. Shepard writes as follows:

It has been my good fortune to see a large number of 1916 men during the last few months and I feel that the rest of the class would be interested to know what they are

doing and where they are located, so I will give you a few notes to place under 1916 class news. They will tend to fill a void long noticeable.

First of all comes Paul Buxton, "himself." He is production manager of the "crank shapes" department in the Hendley Machine Co. at Torrington, Conn. During the war Buck's expert services were of great assistance to General Pershing. (Ask him yourself, if you don't believe it.)

Hovey Freeman is now in Providence, R. I., managing numerous properties. "Capt." Freeman performed valiant service abroad as personal aide to General Rice, Chief Ordnance Officer, A. E. F.

Speaking of Ordnance and Captains there is also Doug Robertson who had charge of a dump at Domgermain, France, with the First Army. He is now with the Winchester Repeating Arms Co., New Haven, Conn., as Manufacturing Engineer in the Fishing Reel Department.

Lately of 16th Street, Washington, D. C., there are Santy Claussen, Jimmie Evans, Bill Farthing, Hen Shepard, Ed Barry and Jeff Gfroerer. They were all an aircraft ornament work. Jeff represented the Army while the rest of the bunch did what they could to help out Secretary Daniels. Santy is now back with the Bemis Bros. Bag Co. in Boston; Jimmie is with the Savage Arms Corporation in New York; Ed is now superintendent of some plant in Buffalo, N. Y.; Bill is back in Texas; Hen is selling hand-elevating trucks down in Connecticut, and Jeff is Assistant Superintendent at Sargent & Co. in New Haven.

Dicky Rowlett is now supervising some important design work on machine guns as a civilian at Springfield Armory, Mass. Mr. Rowlett can be reached at either the Hotel Kimball or Hotel Bridgway any evening from 9 to 12.

Saul Makepeace is back in Providence, R. I., laying out cotton mills. It is said that he carried away most of the cups and medals offered in golf tournaments around Providence last fall.

Jack Freeman is still doing research work at the Bureau of Standards in Washington, D. C.

Arvin Page is now at Columbia Lodge, Palmerton, Pa.

Fred Haggkvist is still in the service. He is a lieutenant (jg) at Pensacola, Florida, as Photographic Officer.

Red Russell continues to make boilers at Andrew Square, South Boston. He says that they are now using noiseless typewriters in the plant.

Harold Burkhardt is in the engineering department of the Stevens Duryea Plant at Chicopee Falls, Mass.

Lawrence Delabarre is with the Bullard Machinery Tool Co., at Bridgeport, Conn.

Raymond Wagner is with the Witherbee Igniter Co. at Springfield, Mass.

Ted Hine has started in to be an architect on his own book at New Britain, Conn.

Richard Berger is also hooking it alone for he has opened up his own research laboratory at 104 French Street, Bridgeport, Conn.

"Vic" Hayden is general manager of the Connecticut Metal & Chemical Co., at Berlin, Conn.

"Mc." McDonald is with the Standard Oil Company in Hongkong, China. He expects to come back to the States for a vacation this spring.

Bill Knieszuer is with the Emory-Booth-Blair-Warner Co. at 149 Broadway, New York City.

Bill Freethy has gone to New Mexico for his health.

Robert Burnap is at the Edison Lamp Works, Harrison, West Virginia.

M. V. Root is with the Greenfield Tap and Die Corporation at Greenfield, Mass.

Elmer Haines is with the Travelers' Insurance Co., Hartford, Conn.

Arthur Wells is with the Acme Wire Co., at New Haven, Conn.

Marshall Wellington is with the Wallace & Tiernan Co., 349 Broadway, New York City.

1917

WALTER L. MEDDING, *Secretary*, Camp Gordon, Atlanta, Georgia

ARTHUR E. KEATING, *Assistant Secretary*, 893 Seaview Avenue, Bridgeport, Conn.

The story on January first was: 645 men in class; 303 subscribers; \$35,530 subscribed; 47 per cent of class subscribing; \$117 average subscription.

In view of the success with which the class is supporting the Endowment Fund a little history of the work up to the present may be in order. Early in October at a meeting of the representatives of the different alumni classes held in the Engineers' Club in Boston, Johnnie DeBell and Joe Lobdell were present and plans were then formulated for the Seventeen organization. It was at first thought that Johnnie could handle the matter from New York but this long distance scheme proved infeasible and so the "Nineteen Seventeen Home Office" was opened in Room 3-205 at the "Stute" with Walt Beadle as managing director. Several official and unofficial branches were established throughout the country; the main one being at New York in the office occupied by Johnnie and Penn Brooks in the Equitable Building directly adjoining that of General DuPont. G. W. Thomson kindly offered the facilities of the Mare Island Navy Yard to cover the Pacific States while Les Hoffman donated the services of the Bureau of Standards to form a Washington office. The Middle West was left to take care of itself—and it did. The home office at Cambridge was underwritten by several men around Boston who took it upon themselves to form a Boston committee consisting of themselves: Walt Beadle, Let Ford, Art Gilmour, Ed Tuttle, Louie Wyman, Bill Gray, Paul Leonard, Loosh Hill, Larry Gardner, Fred Stearns and Joe Lobdell. The first class dinner was held in the Walker Memorial on the night of November 25 and every man who could possibly be reached by mail or telephone around the vicinity was notified. The following were present: C. K. Allen, Batchelder, Battis, Ken Bell, Bernard, Bertelson, K. M. Childs, Clayton, Crowell, C. M. Dean, Dennen, Dunham, Eddy, Fales, Farnsworth, Ferretti, Gramstorff, H. B. Gardner, Gilmour, Gilliard, W. A. Gray, Hannah, L. T. Hill, Holton, Judd, Keach, K. Lane, Leonard, W. J. Littlefield, Lobdell, Logan, Pollard, J. A. Rogers, Stearns, A. E. Tuttle, and Wyman. No formal speakers were present but different members of the class laid the Endowment Fund situation before the group. As a result twenty new subscribers and \$2,975 were added to the class total. Every man present had his name on the list before the close of the evening and as the class total then stood \$235 short of ten thousand, a number of those present made up the difference by extra subscriptions so that the total amount stood \$10,015.

On the day before Thanksgiving notices were sent out to every member of the class, giving a report on this dinner and urging support not only to the Fund but to the War Records and the new Register of Former Students, which is to be published during the coming spring. Notice was given of the next dinner to be held on December 9 and return post cards were enclosed, asking each man to send a message to be read at the dinner if he would be unable to himself attend. The results were most gratifying and lack of space alone prevents printing them in full.

During this time the New York branch staged a dinner at the Technology Club with twelve men present. These men constituted themselves as a "visiting group" to personally call on the delinquents. Another dinner was held December 12 at the Technology Club with fifteen present and the New York district then became seventy-seven per cent subscribed.

Unfortunately the weather turned out stormy for the dinner in the Walker Memorial on the night of December 9 and the crowd was small. Johnnie DeBell came over from New York and Dad Wenzel from Hartford especially for the occasion. The thirty men who attended were: C. K. Allen, Ames, Beadle, Bernard, Cianciolo, I. B. Crosby, DeBell, Dickson, Drobisch, Dunham, Eddy, Fales, Ferretti, F. L. Ford, H. B. Gardner, Gilmour, W. A. Gray, Hannah, E. H. Heath, L. T. Hill, G. A. Hunt, Leonard, Lobdell, H. J. McDonald, McManus, H. F. Powers, F. P. Sherman, A. E. Tuttle, Wenzel, and R. T. Whitney. A message was sent directly from the dinner to every member of the class who had not subscribed to the fund; unfortunately there were so many of these that it was impossible to write those who had sent in their subscription cards. In all, some two hundred eighty-nine letters were written at the dinner, which was more like a problem fest in the old Union than the usual gatherings, which navigated in the past under the epithet of "eats, smokes and drinks."

The biggest problem that the home office has met with is the difficulty of poor and uncertain addresses. Many men who have always been carried on the class rolls as among the most active will be found missing from the Register of Former Students, the War Record and the list of subscribers to the Endowment Fund, simply because they could not be reached.

Space alone prevents printing in full the messages which were received and read at the dinner and also the complete addresses of many of the men mentioned in these notes. In order to get around this latter point a system has been worked out by which any man in the class may get in touch with any other, providing that said man has filed his correct address at the Institute. Simply address the letter "Care of 1917 Home Office, Room

3-205, Massachusetts Institute Technology, Cambridge, Massachusetts" and mark it "Special Rush—Forward Without Delay."

Dud Bell's excuse for not showing up at the dinner was partially explained by his statement that, "for the first time in my life I feel like a damn slacker, and I hardly have an excuse to offer except the usual one of too much to do." He continues to say, "My place is at the 'Stute' right now, but I can't afford the time, and that's no lie." We were under the impression that Dud got his degree but we are either wrong or else something has happened to whet his thirst for knowledge. Anyhow the Lenox is not bone dry yet. At least not when The Tech holds its dinners. Bill Laskey, VI, from New York, also plead that "time and distance make it impossible to attend." Gannett, now in Hoboken, inquired particularly for any of the "Course II bunch who happen to be around." Johnnie Babbitt, I, said, "mailed at the same time as this card is a contribution to the Endowment Fund. Good luck to you in your work," and needless to say, Johnnie is a man of his word.

E. L. Clark, VI, from Schenectady, thrust out his chest proudly and wrote, "Let the class keep growing. Eight pounds of boy will grow until 180 pounds hits Tech some day like his daddy did. I'll bring him in and introduce you all at some future class dinner." No time like the present, Ed. Howard Mann, XV, from Birmingham, Ala., is also feeling rather good these days, as he says he is "busy raising a Mann for the Class of 1942?"

Panettiere, II, remembered himself to the "gang" and Althouse, XV, sent his "best regards to the bunch." Hou X wished "Good luck to all prosperous classmates." Igleheart, II, writing from Easton, Pa., said that he was sorry "to miss the gathering" but that it was "harder to make peace than war," from which we infer that he too had a soft job in the army. E. M. Woodward, IV, seems content with Chicago, which he says is the "busiest town in the world." We have some recollection of Chicago offices and street car lines quitting at 3.30 p. m. during the recent weeks (but perhaps they start at five a. m.)

Al Moody, XV, is "down in the center of Pennsylvania trying to learn to make silk. Seem to be the only Tech man in the place." The place is Shamokin and fortunately Al didn't omit the word "Tech." R. S. Moulton, II, also in Pennsylvania, at Bristol, pleads "distance" and says he is in the "shipbuilding business." George Duryea, II, writing from Buffalo, charged us to "have a good dinner and put the class over the top." We did.

Penns Grove, N. J., is again on the map for C. C. Adams, X, has settled there and says that "New Jersey and Delaware had our little 'Give' and 'Get' meeting and feel confident that the subscription will go well over the top." Jimmie Doon, XV, from somewhere in New Hampshire, listed by Mr. Burleson as Henniker, sent his regrets. Possibly the train did not run the day of the dinner. T. G. Best, VI, said it was a "long cry from the Oklahoma oil field to the banks of the Charles" but that he was "aboard for the Endowment Fund."

E. P. Warner, II, from Langley Field at Hampton, Va., recalled the memories of "John Tyler and Ducky Swan who gave their lives in the service" and who he said, should be "examples to the rest of the class in the present reconstruction period."

Many messages were received from the New York crowd telling us of their meetings. R. P. Martin, VI, said that "bloodhounds were sent out after the unregenerates" and that "Hansen, VI, came to dig me out and we had dinner." Bully for Hansen! E. B. Payne, VI, said to "get under the drive." His wish was gratified. We almost forgot to say that Martin "expects to get married in the spring and settle down." Bob Scannell, IV, hopes "to make the next one." H. N. Solakian, III, from Ilion, New York, also looks "forward to a recurrence of this event which I hope to be able to attend." J. A. Martinez, V, patted the Faculty on the back a little and said that the Fund should be supported so as to keep up the standard. Dex Tutein, II, said that 1917 was "ahead of all surrounding classes down to 1900 in New York." Penn Brooks also volunteered the information that New York was "coming along." He also gave the class his blessing. Rumor hath it that Penn was followed to New York from France. He is also said to be about to become engaged. Wrong! We mean in business.

Kittredge, I, gave an encouraging report on the Cleveland Tech Club's work and W. I. McNeill, XV, wrote on behalf of the Tech Club of Pittsburgh. Westbrook, V, said "Akron M. I. T. Club—56 members—\$20,000. Two of the members have agreed to furnish the twenty thousand if the other 54 raise an equal amount. Consequently, we are all on the job to get the forty thousand." W. C. Mehaffey, II, sent his "best to the whole (censored) gang." Ramsbottom, VI, says his name has been changed to "Ramsey" but (and we are mighty glad to hear this) otherwise I'm the same fellow." Art Miller, I, enclosed "Greetings" and B. C. Curtis, I, reported "All O. K."

Lin Noyes, IV, poured out this, "Hello Gang! I'm up here where it's twenty below. Phil Hulburt can tell you about the 'Ironwood Daily Globe' (as if Linwood hadn't before mentioned the sheet during his four years' sojourn at the Delt house). Mighty nice of you to

hold the dinner on my birthday I feel honored (he should) only regret that I am not with you (ditto)." Stan Dunning, XV, is engaged on the "fundamentals of a sheet metal business" at London (Ontario). Stan Krug, VI, from Chicago bewailed the coal shortage and the "H. C. of a trip to Boston." Phil Hulburd, IV, now teaching at Exeter, couldn't make the dinner because "my classes are so arranged it is impossible to get to Boston for a 6.30 gathering." We can remember when Phil used to cut classes. E. B. Stockmann, XV, writing with a red typewriter ribbon, was sorry that he couldn't "be present to give a personal earful but my AD LIB presence must be elsewhere."

Nig Sewall at E. Angus, P. Q., invited the class up for "some good deer shooting. Also snowshoeing." Frank Conaty, I, Captain 33rd Field at Camp Grant, announced his candidacy for class poet and submitted samples of his work but space will not, etc., etc. Cy Medding, I, has been discovered as a Captain 7th Engineers at Camp Gordon. So far as we know, he has not yet communicated with the Secretary.

Ham Wood, as before stated, is living at the Sigma Chi House and doing some unknown work. He came to light and wished a "hearty handshake to all except the Endowment Fund Committee—who deserve a good swift kick in the pants." Needless to say, Ham was too lazy to walk across the bridge to the dinner but the Endowment Fund Committee in a body is looking for its "deserts."

Bob Erb, XV, is assistant to the Superintendent of the W. H. McElwain Co., shoe manufacturers at Newport, N. H. Quoting verbatim from his dirge of November 5, "It is impossible for me to compete for the class baby prize, and if I am able to carry out my present resolutions (wise proviso, Robert) I will be able to make this statement many years hence." The assistant secretary wrote Mr. Erb under recent date, reminding him that everyone falls sooner or later. Mac McGrady, XV, is in charge of the Bleaching and Dyeing department of the Massasoit Manufacturing Company of Fall River but says that the title don't count for much and that he only forwards it "as a matter of record." H. L. Melvin, VI, is assistant electrical engineer of the Utah Power and Light Company at Salt Lake City.

Ray Goudey, I, is assistant engineer and has charge of the laboratory of the Bureau of Sanitary Engineering of the California State Board of Health. Ray says he spends "fifty per cent of his time in the field work and investigations and the other fifty per cent presumably in the lab." Tom Hannah, I, is with the Turner Construction Co. in Boston, and Chet Allen, II, and Ken Childs, II, are with the Factory Mutual in that city.

D. H. McClelland, IV, got lost as far as the Institute address files were concerned, but turned up the other day and is in Boston with the American Woolen Co.

L. E. Schoonmaker, Captain C. A. C., who believes in war anyhow, is still headed for Germany: latest advices note his departure from Brest, where he was in the baggage service, to Coblenz. No wonder A. E. F. baggage went astray with Schoonie "smashing it."

W. P. V. ("BVD") Bealer erstwhile architect, is still architecting in Washington, D. C., where he says there is considerable chance for constructive work. He must be mighty busy, for he doesn't answer telegrams.

Henry Maxwell Kimball is with Trowbridge and Ackerman, architects, at 19 West 44th Street, New York, and was married in 1918, and enters his daughter Josephine (age 0, May 30, 1919) in the class baby contest.

Johnnie M. Mertz likes France so well that he is trying to reform 'em. He writes from Vienne (Isere), "If you have a map of France handy you can locate this jumping off place about twenty miles south of Lyon. I was discharged in France from the 23rd Engineers and worked for the American Relief Administration in Paris for a little over two months. While I was there I located my present position. The work consists of trying to put some American ideas about the design and construction of paper machinery into a French concern here."

I. B. McDaniel promised Johnny DeBell to "set 'em up, no matter how dry the country" if 1917 beats 1916 on the drive. Time to set 'em I-beam. Art Keating's typewriter has "gone west," but he didn't say why she went. Justy Basch writes, "Goldie (Henry F. Goldsmith) and I have departed from our chosen profession and are trying to sell something to the mechanical engineers. After our courses with Professors Berry and Lewis we thought we knew so much about heat conductivity that we would try and sell radiators. Not the kind that you gild up and leave in our front parlor, but the kind that sits on the front end of an automobile and is the first to be smashed in an accident." These are made by the G. & O. Mfg. Co., New Haven, Conn.

Sam Clayman is in the paper game in Philly. His roommate says he "liked the paper work at Bangor, Maine, so much that he thought he would try to be a second A. D. Little." Don Swain is with Henry W. Peabody and Co., 17 State Street, New York,

in the exporting and importing business. Fred Foss is a structural engineer with F. T. Ley and Co. in New York.

Paul Woodward is most of the chemical department of the Laurentide Paper Works at Grande Mere, Quebec. Between his researches in newsprint, sulphite pulp and ground wood pulp, he is "playing golf almost every day and getting out on long canoe trips through the wilds." He wrote this before winter clamped down. Information is on file concerning the Grande Mere golf course and its other attractions besides golf. "Prenez garde," Paul.

Al Ferretti has joined the Amalgamated Association of Pedagogues, being instructor of Mechanical Engineers at Northeastern College.

Frank Hastie, who is a '17 man, Chuck Loomis to the contrary, writes in from Camp Humphreys, Virginia, as follows:

"The army life suits me pretty well, down in the sticks for six months and then in the big city. Ralph Millis and Phil Cristal are here in the Post-graduate School — at present studying military mapping. Cristal went out via horseback at 8.30 A. M. and has not yet returned (7 P. M.). When he does he will probably eat his supper off the mantelpiece. (Editor's Note: Later — Cristal, P. N., Captain Engineers, duty to sk in qrs.) Life is settling down somewhat and we now have two bridge games every evening in the clubroom — however my notion of poker as the army game is fading out. My pet job seems to be as Supply Officer — the trouble is once you do it you are always picked because you have had the experience."

Ray Brooks dropped in the other day from Kelly Field where he is still flying around for Uncle as a Captain, Air Service. His left limb is slightly lame on account of the weight of the medals, but as he has promised us a real interview for the next issue we will not "scoop" him but let him tell his own story.

Dunc MacRae was in charge of the chemical and metallurgical research of the Westinghouse Lamp Co. at Bloomfield, New Jersey, when the war broke out. After serving in the Comical Warfare Service at Cleveland, until February, 1919, he returned to the Westinghouse Co., as research chemist in their Pittsburgh plant. Lev. Lawrason has started for Mexico as agent of the Gulf Pipe Line Co., but did not indicate where he wished his ransoms forwarded.

A. R. Knight is doing development work along chemical engineering lines for the Republic Rubber Corporation, Youngstown, Ohio. Roland H. Eaton is repairing steam engines, with the Harrisburg Repair Co., Brooklyn, New York.

It looks very much as if the Betas weren't the only fraternal organization to claim Neal Tourtelotte, as he writes on Firestone stationery.

"I am now a real knight of the *grip*, having as my territory the Yakima Valley — one of the richest valleys in the whole northwest. It is full of Indians and farmers, both of whom are rich as the deuce — the former from leasing their lands, and the latter from cultivating said lands. It is not an uncommon sight to see some buck Indian, dressed in all the vivid colors of the rainbow, go gliding by in a Packard or a Hudson. "Neal's Ford (not Neal) has among other accomplishments, self-starter, winter top, foot warmer, cord tires, demountable wheels, and a spot light!" Clark Robinson is designing movie settings in New York, being just as full of temperament and windsor ties as ever.

A later despatch from Neal reports the following: "I had the whole week-end of the Christmas holiday as a vacation due to the fact that I finally got agents in three towns in my territory that we have not been able to land before. The boss was well pleased. I did not tell him that I got one fellow by finding out that I had fed him from my company kitchen one day while we were near Soissons and he had not had anything to eat for 24 hours and I told him that he should return the favor by taking on our line now and helping me out! Such is the use of army experiences."

Two marked copies of this issue are being sent to the boss.

The Tech of December 30, says: "Mrs. Edwin Read of Lexington has announced the engagement of her daughter, Frances, to Harold Osgood Whitney, 1917, son of Mr. and Mrs. A. H. Whitney of Watertown. Whitney entered Course II at the Institute with the Class of 1917, where he stayed for two years. During the war he was a member of the United States naval reserve corps."

Pittsburgh informs us that, "E. F. Twoomey, '17, XI, a former swivel chair naval aviator, and Howard E. Bailey, 1917, XI (antecedents not quoted), recently joined the staff of Morris Knowles, Inc., Consulting Engineers of Pittsburgh. Mr. Knowles is an 1891 man. Prior to active service in the aerial defense of New York's midnight roofs Twoomey was on the staff of the supervising engineer of Camp McClellan, Alabama."

We are in receipt of a letter on the stationery of the "Sibley College of Mechanical Engineering, Cornell University," bearing the name of "C. D. Albert, M. E., Professor

Machine Design." This wins the pedagogic pedestal of the class. It was worthy of mention in this connection that Freddy Stearns is an instructor in the mechanical engineering laboratory at the "Stute" in spite of the fact that he was at one time on the News Board of *The Tech*.

To R. L. O's *Boston Herald* we are indebted for the following: "Mr. and Mrs. Skeffington S. Norton of 10 East 63rd Street, New York City, have announced the engagement of their daughter, Miss Rose Howard Norton, to Enos W. Curtin, son of Mr. and Mrs. J. Clark Curtin also of New York. Mr. Curtin was graduated from the Massachusetts Institute of Technology and served as captain in the A. E. F. artillery during the war." The rumor that the Institute will sue the *Herald* for this libel has been positively denied. It is understood that the marriage has taken place, but we haven't been able to extract any words on the subject from Eenie, who when last heard of was in Peru (Mass.).

The Associated Press tells us that, "The engagement has been announced of Miss Charlotte Barnes to Mr. Arthur E. Gilmour of Winchester, Mass. Gilmour saw active service with the field artillery of the 77th Division in the Vesle Aisne sector and also in both the Argonne and Argonne Meuse offensive. He is now in the engineering department of the Edison Manufacturing Company of Boston."

Jimmie McDougall wrote George Gibbs a card the other day from Chatillon-sur-Seine, signing his name as Captain C. A. C., R. R. and C., and giving this information "Was married in Paris, September 16. What do you say to that, George?"

1918

D. M. McFARLAND, *Secretary*, 306 Bay State Road, Boston, Mass.

On November 21, in Walker Memorial, the class of 1918 had a banquet and reunion for those men living in Boston and vicinity. Those present were J. W. Clarkson, H. M. Blank, J. C. Howe, J. A. Clark, Jr., J. Hanley, Charles Gow, W. P. Ryan, Max Seltzer, Charles Nangle, Al Saunders, Harold E. Collins, H. N. Blount, J. M. Bugbee, L. I. Levine, N. Krasnoff, E. A. Greenleaf, A. J. Giuranovich, Jr., K. L. Ford, S. H. Franklin, C. B. Bellis, W. S. McGuire, J. C. Irwin, Jr., G. O. Ekwall, E. R. Stewart, J. W. B. Kennard, W. J. Henry, S. Rubin, E. A. Mead, B. R. Cleveland, F. A. Travers, T. S. Fogarty, H. H. Fisk, A. A. Ubelacker, R. B. Wells, C. N. Woodland, K. H. Kaiser, B. O. Pinkham, I. R. Young, J. H. Kelley, R. G. Mahoney, P. A. McGrenery, A. L. Hamilton, G. H. Elz, G. B. Smith.

Mr. Barker of the class of 1911 gave an outline of the organization of the Endowment Fund Committees. The idea was to start right then and have every man present sign his pledge card and then try to help the committee by personal appeals to his friends. Before the meeting adjourned, one hundred per cent of the men present had subscribed and the 1918 boys had started their drive.

Mr. and Mrs. Frank B. Killen of Pittsburgh announce the engagement of their daughter, Mildred Hutchinson, to Mr. William H. Turner. Miss Killen attended the Beechwood School in Philadelphia and Pennsylvania College for Women. Mr. Turner, a 1918 Course III man, is now finishing his course at the Institute. During the war he served as lieutenant (Junior Grade) in naval aviation.

Mr. and Mrs. Charles A. Woggett of Melrose Highlands announce the engagement of their daughter, Marguerite, to Mr. Royal B. Wills, son of Mrs. George A. Wills of Melrose. Miss Woggett was graduated from Miss Wheelock's Kindergarten Training School in 1916. Mr. Wills is a Course IV man who did considerable work for the 1918 "Technique."

Miss Mary Gertrude Wagner, daughter of Mr. and Mrs. John Wagner of Hingham, and Thomas Donnelly, Jr., son of Mr. and Mrs. Thomas J. Donnelly of Arlington, were married recently in Hingham. Mrs. Donnelly, a graduate of Wellesley, has been a teacher of languages in Arlington High School. Mr. Donnelly, after completing his junior year in civil engineering entered the naval reserve and won his commission as ensign.

G. A. Sackett, X, is with the Goodyear Tire and Rubber Company of Akron, Ohio. T. P. Kelly, X, has a position with the Glidden Varnish Company of Cleveland, Ohio. Arthur Smith, is in the Efficiency Department of the Aluminum Company of America. W. S. McGuire, X, is with the United States Color and Chemical Company, of Ashland, Mass.

The wedding of Miss Rachel E. Felton and Frank Hollis Appleton took place on Saturday, November 15, at the home of the bride's father, Arthur P. Felton, at 15 Park

Vale Avenue, Allston. The bridegroom, who is from White Hall, Md., is a graduate of the Massachusetts Institute of Technology, class of 1918. Their future home will be in White Hall.

Mr. and Mrs. George F. Mead announce the engagement of their daughter, Miss Mildred Mead, to Charles Henry Watt, '18. Mr. Watt is a graduate of the Institute and he also holds a degree from Harvard. During the war he served as a lieutenant in the Field Artillery and since leaving the service has been connected with the American Zinc Company, at Mascot, Tennessee.

Mr. and Mrs. George M. Rumney announce the engagement of their daughter, Isabelle, to John Robinson Poteat, son of Dr. E. M. Poteat and the late Harriet Hale Gordon Poteat of Brookline, Mass. Mr. Poteat is connected at present with Lockwood, Greene & Company, engineers of New York. During the war Mr. Poteat served in the navy under the Special Board of Anti-Submarine Devices for a year, being commissioned and placed in command of a sub-experiment station at Nahant, Mass.

NEW ADDRESSES

E. A. Grunsfeld, Jr., Hotel Commodore, New York City; Ervine O. Herman, 1202 East 114th Street, Cleveland, Ohio; A. A. Uebelacker, care Dr. W. H. Rice, 290 Newbury Street, Boston, Mass.; R. S. Coward, United States Air Service, Mitchell Field, Long Island, N. Y.; J. H. Friery, 169 Chestnut Street, Jamaica Plain, Mass.; Willard B. Riddell, 316 Huntington Avenue, Boston, Mass.; Captain Hilton W. Long, 474 West 3d Street, Lexington, Ky.; A. L. Williams, 207 Newbury Street, Boston, Mass.; H. W. Hatch, 11 Belvidere Street, Boston, Mass.; S. V. Chamberlain, 27 St. Botolph Street, Boston, Mass.; E. S. Dennison, 390 Massachusetts Avenue, Cambridge, Mass.; E. P. Stevenson, care of A. D. Little Company, Cambridge, Mass.; H. G. Swan, Defender Photo Supply Company, Driving Park Avenue, Rochester, N. Y.; H. P. Geisler, 156 Lincoln Avenue, New London, Conn.; Robert B. Swain, Pomfret Center, Conn.; S. M. Foster, Harvard Club, New York City; W. H. Kayser, 389 Essex Street, Salem, Mass.; Robert V. Kleinschmidt, Engineering School, Harvard College, Cambridge, Mass.; Miss Helen Kleinschmidt, 19 West Kirke Street, Chevy Chase, Md.; Samuel V. Lehrman, 1022 Montclair Avenue, Detroit, Mich.; Robert W. Van Kirk, Riverside Club, Pennsgrove, N. J.; Ellsworth V. Holden, 104 Charles River Road, Cambridge, Mass.; D. R. Buchanan, 400 Charles River Road, Cambridge, Mass.; Arthur W. Pope, Geneva, Ill.; Harold V. Atwell, Draper Street, Hopedale, Mass.; Ray W. Harris, 29 East 17th Street, Brooklyn, N. Y.; Harold V. L. Kaler, Box 652, Foxboro, Mass.; Henry D. Bevins, 136 Church Street, Berlin, N. H.; Elliott D. Harrington, General Electric Company, Schenectady, N. Y.; R. Stanley Leonard, 314 Shawnee Path, Akron, Ohio; John T. Norton, 350 Waverley Avenue, Newton, Mass.; John S. Salah, 2250 East 17th Street, Brooklyn, N. Y.; C. C. McIvor, General Electric Company, Schenectady, N. Y.; Lawrence Cunningham, 135 Ivy Street, Brookline, Mass.; Walter B. Engelbrecht, 36 Jackson Street, Staten Island, N. Y.; L. Franklin Van Zelm, 1 Riverdale Avenue, New York City; Harold C. McLaughlin, T. S. Chopak House, Chattanooga, Tenn.; Philip M. Dinkins, Zinzee & Company, Hastings on Hudson, N. Y.; Elbert H. Bancker, Massachusetts Institute of Technology, Cambridge, Mass.; A. B. Sanger, 94 Warren Avenue, Hyde Park, Mass.; G. A. Elz, 86 Orchard Street, Jamaica Plain, Mass.; E. A. Clogher, 8 Nottingham Street, Dorchester, Mass.; J. A. Williams, 1318 North Caroline Street, Baltimore, Md.; F. A. Washburn, 112 Broad Street, Lynn, Mass.; Chen Tan and S. L. Yang, Box 156, Massachusetts Institute of Technology, Cambridge, Mass.; Marvin Pierce, 105 West 40th Street, Lord Construction Company, New York City; G. E. McLaughlin, 17 Stevens Street, Peabody, Mass.; Francisco Lobos, Massachusetts Institute of Technology, Cambridge, Mass.; C. W. Lippitt, Jr., 18 Story Street, Cambridge, Mass.; Joseph Herzstein, 2 Hill Street, Troy, N. Y.; Arthur C. Hardy, Massachusetts Institute of Technology, Box 161, Cambridge, Mass.; J. W. Gustaveson, 1512 Wood Street, Wilkinsburg, Pa.; Robert V. Derrah, 88 Hillcrest Apartments, Salt Lake City, Utah; Irving B. Crosby, 9 Park Lane, Jamaica Plain, Mass.; Carl E. Adams, R. F. D., Milford, Mass.; Lester N. Woodland, care of Hudson Motor Car Company, Detroit, Mich.; John B. Woodward, 322 Belmont Avenue, Newark, N. J.; O. G. Huf, 706 Coal Street, Wilkinsburg, Pa.; Capt. Herbert B. Wheeler, Marfa, Texas; John T. Kiley, 130 Dodd Street, East Orange, N. J.; James E. Longley, Lock Joint Pipe Company, East Orange, N. J.; John R. Longley, 709 West Vine Street, Kalamazoo, Mich.; J. R. Poteat, care of Lockwood & Green, 101 Park Avenue, New York, N. Y.

1919

E. R. SMOLEY, *Secretary*, Horse Head Inn, Palmerton, Pa.

ENDOWMENT FUND

Soon after the drive was launched to raise funds equal to Mr. Smith's offer of four million dollars, the class of 1919 organized to help in this work. The following committee took up headquarters at the offices of Arthur D. Little, Inc., Cambridge, Mass.:—M. C. Balfour, M. E. Goodrich, R. Hackett, H. H. McClintic, P. D. Sheeline, E. R. Smoley, I. Stevens, D. D. Way and E. F. Doten, chairman. Letters were sent to all the members of our class, as many were interviewed as possible. A class dinner was held on December 19 with 22 men present.

Up to December 23, 162 of our class had subscribed. Some, perhaps about 20, have signed up with other classes. Nevertheless, out of a class of some 570, this is a very poor showing.

A very large percentage of the class did not answer the letters sent out to them, and judging from those who did answer it was evident that a certain percentage of our class did not seem to be in a position to subscribe to the Fund. A number of letters probably did not reach their goal, another group which brought no replies or returns was those members of 1919 who spent but a year or two at Technology.

Let us hope that a large percentage of our class will subscribe from the above date to January 1—that the unexpected will happen!

WAR RECORD

Up to November 20, two hundred and sixty-seven out of five hundred and seventy or about forty-seven per cent of our class had sent in their war record. This is a mighty poor showing when you compare the war records obtained at other schools and organizations. The third and final circular was sent out about the beginning of December. This is your last chance, so come through, help boost the 1919 percentage, and help make the War Record a success.

M. C. Balfour returned in August from gay Paris and took up quarters with the Boston Bio-Chemical Laboratory on Boylston Street. Bal tells of how he highbrowed at Monte Carlo for a week, traveled the Riviera from Nice over the Italian border, spent two weeks' leave in England and Scotland, and lived the Parisian life long enough to change his philosophical viewpoint of it.

Oscar Mayer is still with the Mexicans in a mining camp at Cananea Consolidated Copper Co., Cananea, Sonora, Mexico.

Back at the 'Stute are George French, Webb Shippey, Jimmy Gibson, Os Cammon, Bob Scott, Carl Thomas, Johnny Clark, M. H. Clark, and others. We are glad to note that under the recent faculty ruling the old crew will receive diplomas with the class of 1919 inscribed.

Dean Webster, Howdy Sherman, Ray Bond are with the Du Pont's at Penn's Grove, N. J. Elliot Cannell was married last June and is located at Everett, Mass. Karl L. Nutter, II, located at the Tutwiler, Birmingham, Ala., writes of his extremely interesting work there, the installation of some machinery which is still in the experimental stage. He is working for the Saco-Lowell Shops, Textile Machinery, Newton Upper Falls, Mass.

William Banks, VI, may be reached at 326 Warburton Avenue, Yonkers.

Charles Parsons, VI, address is 116 Lyncroft Road, New Rochelle.

Bob Hackett, II, has returned to Massachusetts, and is with Hillman Thompson Co., manufacturers of sheepskin.

Chuck Drew, XV, dropped a Christmas card from Belgium. We all wish him a prosperous New Year.

Ernest Schwartz, who was instructor in Electrical Engineering at Georgia Tech last year is now working for the Western Electric Co. in New York City, Harold Lloyd is with the same concern.

Larry Dalton is situated in Philadelphia, Pa. Jacob Braverman, 4600 Forbes Street, Pittsburgh, Pa., is at present a student at Carnegie Institute. H. A. Herzog, 9 Linden Street, Salem, Mass. E. R. Helmrich is at present with the Southbridge Water Supply Co. R. W. Mitchell is located at 820 Massachusetts Avenue, Cambridge, Mass., and is working at the Institute. E. F. Deacon is with the Wagner Electric Mfg. Co., 6400 Plymouth Avenue, St. Louis. He was recently married. Art Page, II, 12 Benham Street, Medford Hillside. S. Heyman, 24 Delmar Avenue, Detroit, Mich. Alan F. Winslow of Chicago, is heard of in the October 25 *Boston Post*:—The new secretary of the American

legation to the Czecho-Slovak republic is Alan F. Winslow of Chicago, who has the distinction of being the first United States army aviator to bring down a German plane. He has the Distinguished Service Cross and the Croix de Guerre. His headquarters are at Prague, Bohemia.

Congratulations Paul! Special despatch to the New York *Sun*. Boston, December 5.—Miss Mary Franklin Child, daughter of Mrs. Bertha Cushing Child, 8 Craigie Circle, Cambridge, was married this evening in King's Chapel by the Rev. Howard N. Brown to Paul Daniel Sheeline, Tech. '19, son of Mr. and Mrs. S. E. Sheeline of San Francisco. John Stevens, '19 was best man and Archibald Cochrane, '19, acted as an usher.

We are informed that Jimmy Reis, III, is still alive and working hard at Gary, Indiana, contending with 57 varieties of strikes and a fairly tough winter for operation at a steel plant. Address the Y. M. C. A., Gary, Indiana.

Ev Doten, II, is assistant to the master mechanic at the Boston Rubber Shoe Co. Maurice Goodridge and Johnny Carter are working for the above company. Morton A. Smith, VI, 219 47th Street, Newport News, Va., one of the few left at the Newport News Shipbuilding Co., of the twenty-five Nineteen men who started work in September, 1918, was heard from. Art Johnson is in the plant engineer's office. Wirt Kimball and H. C. Moberg are in the repair department. From M. A. Smith's letter it seems that Moberg is married and is the proud possessor of a baby girl. Congratulations! Leo Beaulien, L. R. Lorenson and M. A. Smith are inspectors in the superintendent's office, this department having direct supervision of all ship construction work. Frank Coleman, previously with the material department, has left to train as assistant engineer on the S. S. "Matsonia," which sails between San Francisco and Honolulu.

A request was sent in for particulars as to what the men who have left Newport News are doing. Send in your news!

Joseph S. Newell, I, is at present with the Armour Co. in Argentina, S. A. Address care Armour Co., Hotel Argentino, La Plata, Argentina, S. A. Arthur Roberts is located at Boston, Mass. Fritz Boley and Leo Kelley are somewhere in South America. Timothy E. Shea, VI, is at present instructor in physics and research assistant in electrical engineering at the 'Stute.

Technique '20 announces that there are a few *Technique* 1919 on sale and offers this opportunity of obtaining one to 1919 men who did not have a chance to subscribe when the book came out. Address *Technique* '20, Cambridge, Mass., care Walker Memorial.

Joseph Kaufman, VI, is research assistant in electrical engineering at M. I. T.

The following obtained M. S. degrees at Technology:—T. E. Shea, in electrical engineering; A. M. Contieri, L. B. Smith in Chemistry; M. Knoebel in electrochemical engineering; Israel Maizlish in aeronautical engineering.

F. G. Elwell, 2d Lieut., received the Croix de Guerre with silver star; American Field Service Medal.

If any one has the address of any of the following kindly send it in:—H. W. Best, XV, A. F. O'Donnell, X, A. G. Richards, X, A. A. Cook, IV, H. N. Shapero, X, P. M. Shaw, IV, J. Lichter, I, V. B. McClurg, IX, W. J. Long, I, G. F. Beers, I, H. C. Wells, IV, H. B. Blumberg, II, W. W. Boyer, III, T. M. Lloyd, VI, Scott Keith, I, C. A. Stowhas, VI, W. R. Mackay, VI.

Chester Stewart, X, is at present battling along with a curriculum of advanced work in chemical engineering at the Royal Institute of Sweden. He sailed from New York, September 25, by way of Gotenburg, reaching his present address:—Matintorgsgoten 5, Stockholm, Sweden, care Sverige Amerikastafstetsen, in October. "Thanks to Professor Vogel's good instruction," says "Stew," "I was able to get along famously, as the people talk German here, and two out of every ten could understand me!" Beginning the first of the year he is to take up "Practikum" in the chemical industries there. We wish Chester all the success in the world in his new undertaking.

Congratulations are due Howard L. Brooks. From the *Tech*:—Lucie Erskine Sawyer, daughter of Mr. and Mrs. Isaac Erskine Sawyer of Holyoke and Howard Leonard Brooks, '19, were married in the Skinner Memorial Chapel in Holyoke. Mr. and Mrs. Brooks will settle in Cleveland, Ohio, where Brooks is in business.

Chi Y. Huang, I, writes from 536 Commonwealth Avenue, Boston, Mass. He has been with the Boston and Maine Railroad and is now working for Stone & Webster, where he has sampled the concrete, steel, hydraulic, architectural and accounting and auditing divisions. After working with the construction department for several months Huang intends to sail for China.

The following Course XIII men are with the Union Shipbuilding Co., Baltimore, Md.; G. W. Cann, A. W. Hough, C. Krebs, P. L. Rhodes, and Mason S. Noyes

Address M. S. Noyes, 11 West Franklin Street, Baltimore, Md. He writes:—"Ray Bartlett is with the New York Shipbuilding Corp. Art Lundquist has finally left his 'dear Boston' and is with the Electric Boat Co. at Groton, Conn. George Inglis is back at the Institute, and Duffy has returned after clearing away our celebrated anti-submarine mine barrage in the North Sea.

W. R. McKenney, II, is back at the Institute finishing up the work missed while in the service. Address Technology Dormitory, Cambridge, Mass. We note that Mac is chairman of the Point System Committee.

L. B. Smith, X, is living up to the reputation he established among his "Xites." He is now instructor in theoretical chemistry at the Institute.

From *The Tech*:—"Kenneth M. Cunningham, '19, 1st Lieutenant Squadron was cited three times by the French and twice by the English.

M. A. Loucks is now treasurer and Os Cammann circulation manager of *The Tech*.

A. P. Ames, XV, has been an instructor in mathematics at Amherst for the past year. He is now to sail for the Standard Oil Co. of New York to open a branch office in Manila, P. I.

Miss C. J. Brennan, VII, has taken up new quarters at White Sulphur Springs, W. Va., as a chemist and bacteriologist for the White Sulphur Springs Medical Institute. She was previously employed by the Dupont Powder Co.

Sidney Jacobs, V, formerly with the Aluminum Company of America is now connected with the Standard Chemical Company at Cannonsburg, Pa.

Howard H. McClintic, Jr., I, is in the design department of the Rankin Works of the McClintic Marshall Construction Company of Pittsburgh.

Kenneth W. Wright, formerly with the Johnson Service Co. of Pittsburgh is now in San Francisco, California.

R. S. Everit writes that he is with the Montezuma Copper Co., at Pilaes de Nacozari, Sonora, Mexico, being employed as a geologist. He writes that he is running the sampling department with a complete staff of Mexicans. Being distinctly minus on Spanish he reports that it is some job but believes that he is getting away with it.